Search Results - Record(s) 1 through 73 of 73 returned.

1. Document ID: US 6004799 A
Entry 1 of 73
File: USPT
Dec 21, 1999

US-PAT-NO: 6004799
DOCUMENT-IDENTIFIER: US 6004799 A

TITLE: Recombinant live feline immunodeficiency virus and proviral DNA vaccines

DATE-ISSUED: December 21, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Luciw; Paul A.	Davis	CA	N/A	N/A
Sparger; Ellen E.	Dixon	CA	N/A	N/A

US-CL-CURRENT: 435/236; 424/192.1, 424/208.1, 435/5, 536/23.1

ABSTRACT:

This invention discloses live-attenuated feline immunodeficiency virus (FIV), and recombinant vectors for producing them, useful as vaccines and therapeutic agents against FIV and diseases associated with virulent FIV infection. In the recombinant vectors and FIVs, one or more genes, or part of the gene(s), responsible for FIV pathogenesis have been completely or partially rendered nonfunctional, e.g., by full or partial deletion or mutagenesis. These anti-FIV vaccines may be given to susceptible hosts in the form of infectious virus or cloned DNA.
38 Claims, 8 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 7

2. Document ID: US 5998369 A
Entry 2 of 73
File: USPT
Dec 7, 1999

US-PAT-NO: 5998369
DOCUMENT-IDENTIFIER: US 5998369 A

TITLE: Treatment of osteoporosis

DATE-ISSUED: December 7, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Khosla; Sundeep	Rochester	MN	N/A	N/A
Conover; Cheryl A.	Rochester	MN	N/A	N/A

US-CL-CURRENT: 514/12; 514/2, 514/21, 530/350, 530/399, 536/23.4, 536/23.51

ABSTRACT:

A substantially pure complex including IGFIIE polypeptide and IGFBP2 polypeptide is described.
Methods for treating an osteoporosis patient and targeting a compound to the skeletal extracellular matrix of a patient are also described.
13 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 3

3. Document ID: US 5981735 A
Entry 3 of 73
File: USPT
Nov 9, 1999

US-PAT-NO: 5981735
DOCUMENT-IDENTIFIER: US 5981735 A

TITLE: Method of plasmid DNA production and purification

DATE-ISSUED: November 9, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Thatcher; David R.	Macclesfield	N/A	N/A	GBX
Hitchcock; Anthony	Wistaston	N/A	N/A	GBX
Hanak; Julian A.J.	Macclesfield	N/A	N/A	GBX
Varley; Diane L.	Willaston	N/A	N/A	GBX

US-CL-CURRENT: 536/25.4; 424/124, 435/384, 435/404, 530/417, 536/26.43, 71/8

ABSTRACT:

A scalable method for the production of highly purified plasmid DNA in Escherichia coli is described, which method includes growing plasmid-containing cells to a high biomass in exponential growth and lysing the cells by raising the pH of the culture to a carefully controlled pH value in which chromosomal DNA is denatured but plasmid

DNA is reversibly
renatured. The method has been developed for the production of pharmaceutical grade DNA for use
in in vivo and ex vivo gene therapy.
36 Claims, 15 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 12

4. Document ID: US 5882914 A
Entry 4 of 73
File: USPT
Mar 16, 1999

US-PAT-NO: 5882914
DOCUMENT-IDENTIFIER: US 5882914 A

TITLE: Nucleic acids encoding the hypoxia inducible factor-1

DATE-ISSUED: March 16, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Semenza; Gregg L.	Towson	MD	N/A	N/A

US-CL-CURRENT: 435/252.3; 435/320.1, 435/325, 536/23.5

ABSTRACT:

The purified and characterization of hypoxiainducible factor 1 (HIF-1) is described. HIF-1 is
composed of subunits HIF-1.alpha. and HIF-1.beta.. Purified HIF-1.alpha. polypeptide, its amino
acid sequence and polynucleotide sequence are provided. A HIF-1.alpha. variant that dimerizes to
HIF-1.beta. producing a nonfunctional HIF-1 complex is described. Methods for the prevention and
treatment of hypoxia-related disorders are provided.
11 Claims, 35 Drawing figures
Exemplary Claim Number: 1,11
Number of Drawing Sheets: 28

5. Document ID: US 5874221 A
Entry 5 of 73
File: USPT
Feb 23, 1999

US-PAT-NO: 5874221
DOCUMENT-IDENTIFIER: US 5874221 A

TITLE: Species specific method for the PCR detection of phythophthora

DATE-ISSUED: February 23, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tooley; Paul	Frederick	MD	N/A	N/A
Bunyard; Britt	Frederick	MD	N/A	N/A
Carras; Marie	Myersville	MD	N/A	N/A
Hatziloukas; Efstathios	Frederick	MD	N/A	N/A

US-CL-CURRENT: 435/6; 435/91.2, 536/22.1, 536/24.3, 536/24.33, 536/25.3

ABSTRACT:

Phythophthora species which infect potatoes may result in the devastating disease potato late
blight or in pink rot. Primers specific for Phythophthora infestans (late blight), and for
Phytophthora erythroseptica and Phytophthora nicotianae (pink rot) have been designed which are
useful for detecting the presence of the microorganisms by polymerase chain reaction methods. The
primers were derived from the internal transcribed spacer region of Phytophthora ribosomal DNA
and may be used to confirm the presence of the microorganisms or to distinguish among them.
10 Claims, 15 Drawing figures
Exemplary Claim Number: 7
Number of Drawing Sheets: 8

6. Document ID: US 5874242 A
Entry 6 of 73
File: USPT
Feb 23, 1999

US-PAT-NO: 5874242
DOCUMENT-IDENTIFIER: US 5874242 A

TITLE: Efficient translation in eukaryotic and prokaryotic systems

DATE-ISSUED: February 23, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mensa-Wilmot; Kojo A.	Athens	GA	N/A	N/A

US-CL-CURRENT: 435/69.1; 435/252.3, 435/252.33, 435/320.1, 435/325, 435/410, 435/455 , 435/471,
536/23.1, 536/24.1

ABSTRACT:

The present disclosure provides sequences and methods for efficient protein synthesis in
eukaryotic and prokaryotic host cells.
6 Claims, 8 Drawing figures
Exemplary Claim Number: 1

Number of Drawing Sheets: 6

7. Document ID: US 5866429 A
Entry 7 of 73
File: USPT
Feb 2, 1999

US-PAT-NO: 5866429
DOCUMENT-IDENTIFIER: US 5866429 A

TITLE: Precision and accuracy of anion-exchange separation of nucleic acids

DATE-ISSUED: February 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bloch; Will	San Mateo	CA	94401	N/A

US-CL-CURRENT: 436/94; 210/656, 210/660, 436/161, 536/25.4

ABSTRACT:

Solvents for salt-gradient anion-exchange separation of nucleic acids, especially double-stranded
DNA and especially by liquid chromatography, are improved by replacing NaCl as the eluting salt
with any of a wide range of alkyl ammonium salts and can be used to elute nucleic acids in strict
order of increasing length, with reduced sensitivity to elution temperature and salt
concentration. Anion-exchange chromatography with these solvents is well suited for
identification of DNA fragments on the basis of size, with greater accuracy, precision, and
resolvable size range than often is possible with gel electrophoresis.
9 Claims, 10 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 10

8. Document ID: US 5856192 A
Entry 8 of 73
File: USPT
Jan 5, 1999

US-PAT-NO: 5856192
DOCUMENT-IDENTIFIER: US 5856192 A

TITLE: Precision and accuracy of anion-exchange separation of nucleic acids

DATE-ISSUED: January 5, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bloch; Will	San Mateo	CA	N/A	N/A

US-CL-CURRENT: 436/18; 435/6, 436/161, 536/25.4, 536/26.43, 564/281

ABSTRACT:

Solvents for salt-gradient anion-exchange separation of nucleic acids, especially double-stranded
DNA and especially by liquid chromatography, are improved by replacing NaCl as the eluting salt
with any of a wide range of alkyl ammonium salts and can be used to elute nucleic acids in strict
order of increasing length, with reduced sensitivity to elution temperature and salt
concentration. Anion-exchange chromatography with these solvents is well suited for
identification of DNA fragments on the basis of size, with greater accuracy, precision, and
resolvable size range than often is possible with gel electrophoresis.
10 Claims, 10 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 10

9. Document ID: US 5824485 A
Entry 9 of 73
File: USPT
Oct 20, 1998

US-PAT-NO: 5824485
DOCUMENT-IDENTIFIER: US 5824485 A

TITLE: Methods for generating and screening novel metabolic pathways

DATE-ISSUED: October 20, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Thompson; Katie A.	Del Mar	CA	N/A	N/A
Foster; Lyndon M.	Carlsbad	CA	N/A	N/A
Peterson; Todd C.	Chula Vista	CA	N/A	N/A
Nasby; Nicole Marie	San Diego	CA	N/A	N/A
Brian; Paul	San Diego	CA	N/A	N/A

US-CL-CURRENT: 435/6; 435/320.1, 435/455, 435/471, 435/489, 435/69.1, 435/91.41, 536/23.1

ABSTRACT:

The present invention relates to a novel drug discovery system for

generating and screening
molecular diversity. The system provides methods for mixing and cloning genetic materials from a
plurality of species of organisms in combinatorial gene expression libraries to generate novel
metabolic pathways and classes of compounds. The system also involves methods for pre-screening
or identifying for host organisms containing a library that are capable of generating such novel
pathways and compounds. The host organisms may be useful in drug screening for particular
diseases, and in commercial production of compounds of interest. The methods of the invention are
also useful in preserving the genomes of organisms that are known or prospective sources of
drugs.
45 Claims, 25 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 21

10. Document ID: US 5843715 A
Entry 10 of 73
File: USPT
Dec 1, 1998

US-PAT-NO: 5843715
DOCUMENT-IDENTIFIER: US 5843715 A

TITLE: Human proteasome subunit proteins

DATE-ISSUED: December 1, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bandman; Olga	Mountain View	CA	N/A	N/A
Au-Young; Janice	Berkeley	CA	N/A	N/A
Hillman; Jennifer L.	San Jose	CA	N/A	N/A
Goli; Surya K.	Sunnyvale	CA	N/A	N/A

US-CL-CURRENT: 435/69.1; 435/252.3, 435/320.1, 435/325, 536/23.5, 536/24.31

ABSTRACT:

The present invention provides polynucleotides which identify and encode novel human proteasome
subunit proteins. The invention provides for genetically engineered expression vectors and host
cells comprising the nucleic acid sequences encoding PSUB. The invention also provides for the
use of substantially purified PSUB, antagonists, and in pharmaceutical compositions for the
treatment of diseases associated with the expression of PSUB. Additionally, the invention
provides for the use of antisense molecules to PSUB in pharmaceutical compositions for treatment
of diseases associated with the expression of PSUB. The invention also describes diagnostic
assays which utilize diagnostic compositions comprising the polynucleotide, fragments or the
complement thereof, which hybridize with the genomic sequence or the transcript of
polynucleotides encoding PSUB or anti-PSUB antibodies which specifically bind to PSUB.
6 Claims, 14 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 14

11. Document ID: US 5843312 A
Entry 11 of 73
File: USPT
Dec 1, 1998

US-PAT-NO: 5843312
DOCUMENT-IDENTIFIER: US 5843312 A

TITLE: Chromatography material

DATE-ISSUED: December 1, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Manz; Thomas	Bad Oeynhausen	N/A	N/A	DEX
Tittgen; Jochen	Bad Oeynhausen	N/A	N/A	DEX

US-CL-CURRENT: 210/635; 210/198.2, 210/656, 210/657, 210/658, 536/25.4

ABSTRACT:

A chromatography material is described for separation of nucleic acid mixtures in which a support
is converted with a silanization reagent, in which the silanization reagent has a reactive group
converted with silanization reagent, in which the silanization reagent has a reactive group
converted with an alkyl- or dialkylamine, or contains a reactive group that can be converted with
an alkyl- or dialkylamine, which is then reacted with the alkyl- or dialkylamine.
10 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 2

12. Document ID: US 5849878 A
Entry 12 of 73
File: USPT
Dec 15, 1998

US-PAT-NO: 5849878
DOCUMENT-IDENTIFIER: US 5849878 A

TITLE: Design and synthesis of bispecific reagents: use of double stranded

DNAs as chemically and
spatially defined cross-linkers

DATE-ISSUED: December 15, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cantor; Charles R.	Boston	MA	N/A	N/A
Chuck; Roy S.	New York	NY	N/A	N/A
Tse; Doris B.	Riverdale	NY	N/A	N/A

US-CL-CURRENT: 530/391.9; 530/387.3, 530/391.1, 530/391.5, 536/23.1

ABSTRACT:

The invention relates to bis-protein-DNA conjugates. A protein having a specific ligand binding
activity is covalently linked to each end of a derivatized DNA molecule. These bis-protein-DNA
conjugates can be used for immunoassays, PCR assays and measuring distances between proteins at
up to 3.4 A resolution. The invention also relates to methods of synthesizing these
bis-protein-DNA conjugates. Synthesis of the conjugates entails derivatizing the 5' or 3' end of
a DNA oligonucleotide and covalently linking that DNA to a protein. The DNA can be conjugated to
the proteins, including antibodies or Fab' fragments, using disulfide bond linkage.
15 Claims, 39 Drawing figures
Exemplary Claim Number: 1,7
Number of Drawing Sheets: 15

13. Document ID: US 5783431 A
Entry 13 of 73
File: USPT
Jul 21, 1998

US-PAT-NO: 5783431
DOCUMENT-IDENTIFIER: US 5783431 A

TITLE: Methods for generating and screening novel metabolic pathways

DATE-ISSUED: July 21, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Peterson; Todd C.	Chula Vista	CA	N/A	N/A
Foster; Lyndon M.	Carlsbad	CA	N/A	N/A
Brian; Paul	San Diego	CA	N/A	N/A

US-CL-CURRENT: 435/455; 435/320.1, 435/463, 435/466, 435/471, 435/472, 435/474, 435/489, 536/23.1

ABSTRACT:

The present invention relates to a novel drug discovery system for generating and screening
molecular diversity. The system provides methods for mixing and cloning genetic materials from a
plurality of species of organisms in combinatorial gene expression libraries to generate novel
metabolic pathways and classes of compounds. The system also provides mobilizable combinatorial
gene expression libraries that can be transferred from one species of host organism to another
for expression. Also provided are specialized cloning vectors for making mobilizable gene
expression libraries. The system also involves methods for pre-screening or identifying for host
organisms containing a library that are capable of generating such novel pathways and compounds.
25 Claims, 27 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 23

14. Document ID: US 5776688 A
Entry 14 of 73
File: USPT
Jul 7, 1998

US-PAT-NO: 5776688
DOCUMENT-IDENTIFIER: US 5776688 A

TITLE: Methods for detection by in situ hybridization of multiple chromosomes or regions thereof

DATE-ISSUED: July 7, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bittner; Michael L.	Naperville	IL	N/A	N/A
Morrison; Larry E.	Glen Ellyn	IL	N/A	N/A
Legator; Mona S.	Chicago	IL	N/A	N/A

US-CL-CURRENT: 435/6; 536/23.1, 536/24.3

ABSTRACT:

Direct label probe compositions which stain DNA of a preselected single chromosome or region of a chromosome of a multi-chromosomal genome are provided that comprise mixed DNA segments which are covalently bound to fluorophore groups through linking groups. The mixed DNA segments are derived from the DNA present in the preselected chromosome or chromosome region. These probe compositions can be used concurrently or sequentially with other probe compositions.
10 Claims, 0 Drawing figures
Exemplary Claim Number: 1

15. Document ID: US 5736149 A
Entry 15 of 73
File: USPT
Apr 7, 1998

US-PAT-NO: 5736149
DOCUMENT-IDENTIFIER: US 5736149 A

TITLE: Allergenic proteins and peptides from johnson grass pollen

DATE-ISSUED: April 7, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Avjioglu; Asil	Towson	MD	N/A	N/A
Singh; Mohan Bir	Templestowe	N/A	N/A	AUX
Knox; Robert Bruce	North Balwyn	N/A	N/A	AUX

US-CL-CURRENT: 424/275.1; 514/12, 530/370, 530/379, 536/23.6

ABSTRACT:

The present invention provides a nucleic acid having a nucleotide sequence coding for Sor h I, a major allergen of Sorghum halepense, and fragments thereof. The present invention also provides purified Sor h I or at least one fragment thereof, produced in a host cell transformed with a nucleic acid sequence coding for Sor h I, or at least one fragment thereof and fragments of Sor h prepared synthetically. Sor h I and fragments thereof are useful for diagnosing, treating, and preventing allergy to Johnson grass pollen.
8 Claims, 22 Drawing figures
Exemplary Claim Number: 1,8
Number of Drawing Sheets: 12

16. Document ID: US 5708158 A
Entry 16 of 73
File: USPT
Jan 13, 1998

US-PAT-NO: 5708158

DOCUMENT-IDENTIFIER: US 5708158 A

TITLE: Nuclear factors and binding assays

DATE-ISSUED: January 13, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hoey; Timothy	Woodside	CA	N/A	N/A

US-CL-CURRENT: 536/23.5; 536/23.1

ABSTRACT:

The invention provides methods and compositions for identifying pharmacological agents useful in the diagnosis or treatment of disease associated with the expression of a gene modulated by a transcription complex containing at least a human nuclear factor of activated T-cells (hNFAT).
The materials include a family of hNFAT proteins, active fragments thereof, and nucleic acids encoding them. The methods are particularly suited to high-throughput screening where one or more steps are performed by a computer controlled electromechanical robot comprising an axial rotatable arm.
12 Claims, 0 Drawing figures
Exemplary Claim Number: 1

17. Document ID: US 5691167 A
Entry 17 of 73
File: USPT
Nov 25, 1997

US-PAT-NO: 5691167
DOCUMENT-IDENTIFIER: US 5691167 A

TITLE: DNA encoding allergenic proteins and peptides from Johnson grass pollen

DATE-ISSUED: November 25, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Avjioglu; Asil	Towson	MD	N/A	N/A
Singh; Mohan Bir	Victoria	N/A	N/A	AUX
Knox; Robert Bruce	Victoria	N/A	N/A	AUX

US-CL-CURRENT: 435/69.3; 435/252.3, 435/320.1, 536/23.6

ABSTRACT:

The present invention provides a nucleic acid having a nucleotide sequence coding for Sor h I, a major allergen of Sorghum halepense, and fragments thereof. The present invention also provides purified Sor h I or at least one fragment thereof, produced in a host cell transformed with a nucleic acid sequence coding for Sor h I, or at least one fragment thereof and fragments of Sor h prepared synthetically. Sor h I and fragments thereof are useful for diagnosing, treating, and preventing allergy to Johnson grass pollen.
13 Claims, 22 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 12

18. Document ID: US 5663319 A
Entry 18 of 73

File: USPT

Sep 2, 1997

US-PAT-NO: 5663319
DOCUMENT-IDENTIFIER: US 5663319 A

TITLE: Probe compositions for chromosome identification and methods

DATE-ISSUED: September 2, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bittner; Michael L.	Naperville	IL	N/A	N/A
Morrison; Larry E.	DuPage County	IL	N/A	N/A
Legator; Mona S.	Chicago	IL	N/A	N/A

US-CL-CURRENT: 536/24.3; 536/23.1

ABSTRACT:

Direct label probe compositions which stain DNA of a preselected single chromosome or region of a chromosome of a multi-chromosomal genome are provided that comprise mixed DNA segments which are covalently bound to fluorophore groups through linking groups. The mixed DNA segments are derived from the DNA present in the preselected chromosome or chromosome region. These probe compositions can be used concurrently or sequentially with other probe compositions.
10 Claims, 0 Drawing figures
Exemplary Claim Number: 1

19. Document ID: US 5660984 A
Entry 19 of 73

File: USPT

Aug 26, 1997

US-PAT-NO: 5660984
DOCUMENT-IDENTIFIER: US 5660984 A

TITLE: DNA isolating apparatus comprising a non-porous DNA binding, anion exchange resin and methods of use thereof

DATE-ISSUED: August 26, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Davis; Thomas E.	Half Moon Bay	CA	94019	N/A
Grothe; Alison M.	San Francisco	CA	94122	N/A
Schwartz; Henry L.	San Francisco	CA	94123	N/A
Gripp; John	San Francisco	CA	94118	N/A
Morrow; Danny G.	San Carlos	CA	94070	N/A
Huystee; Steven Van	San Mateo	CA	94402	N/A

US-CL-CURRENT: 435/6; 210/323.2, 210/455, 210/638, 210/639, 210/641, 210/654, 210/661, 435/287.2, 435/288.1, 435/288.6, 435/30

ABSTRACT:

This invention relates to isolating a DNA sample from a heterogeneous mixture of the DNA and other compounds. The invention relates in particular to isolating a plasmid DNA sample from a cleared bacterial lysate. The invention provides an apparatus and method for using the apparatus to rapidly and economically isolate a DNA sample from such a mixture without the use of hazardous chemicals.
21 Claims, 2 Drawing figures
Exemplary Claim Number: 21
Number of Drawing Sheets: 2

20. Document ID: US 5635602 A
Entry 20 of 73

File: USPT

Jun 3, 1997

US-PAT-NO: 5635602

DOCUMENT-IDENTIFIER: US 5635602 A

TITLE: Design and synthesis of bispecific DNA-antibody conjugates

DATE-ISSUED: June 3, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cantor; Charles R.	Boston	MA	N/A	N/A
Chuck; Roy S.	New York	NY	N/A	N/A
Tse; Doris B.	Riverdale	NY	N/A	N/A

US-CL-CURRENT: 530/391.1; 530/387.3, 530/391.5, 530/391.9, 536/23.1

ABSTRACT:

The invention relates to bis-protein-DNA conjugates. A protein having an antigen specific binding activity is covalently linked to each end of a derivatized DNA molecule. The bis-protein-DNA conjugates can be used for immunoassays and measuring distances between proteins at up to 3.4 .ANG. resolution. The invention also relates to methods of synthesizing these bis-protein-DNA conjugates. Synthesis of the conjugates entails derivatizing the 5' or 3' end of a DNA oligonucleotide and covalently linking that DNA to a protein. The DNA can be indirectly conjugated to an antibody or Fab' fragment, using a avidin/streptavidin-biotin linkage. The conjugates of the invention can be used in immunoassays and PCR assays.
19 Claims, 39 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 15

21. Document ID: US 5612455 A
Entry 21 of 73
File: USPT
Mar 18, 1997

US-PAT-NO: 5612455
DOCUMENT-IDENTIFIER: US 5612455 A

TITLE: Nuclear factors and binding assay

DATE-ISSUED: March 18, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hoey; Timothy	Woodside	CA	N/A	N/A

US-CL-CURRENT: 530/350

ABSTRACT:

The invention provides methods and compositions for identifying pharmacological agents useful in the diagnosis or treatment of disease associated with the expression of a gene modulated by a transcription complex containing at least a human nuclear factor of activated T-cells (hNFAT).
The materials include a family of hNFAT proteins, active fragments thereof, and nucleic acids encoding them. The methods are particularly suited to high-throughput screening where one or more steps are performed by a computer controlled electromechanical robot comprising an axial rotatable arm.
6 Claims, 0 Drawing figures
Exemplary Claim Number: 1

22. Document ID: US 5561064 A
Entry 22 of 73
File: USPT
Oct 1, 1996

US-PAT-NO: 5561064
DOCUMENT-IDENTIFIER: US 5561064 A

TITLE: Production of pharmaceutical-grade plasmid DNA

DATE-ISSUED: October 1, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Marquet; Magda	La Jolla	CA	N/A	N/A
Horn; Nancy	San Diego	CA	N/A	N/A
Meek; Jennifer	Encinitas	CA	N/A	N/A
Budahazi; Gregg	San Diego	CA	N/A	N/A

US-CL-CURRENT: 435/320.1; 435/259, 435/91.1

ABSTRACT:

The invention relates to a method for producing plasmid DNA, comprising the steps of: (a) lysing cells containing the plasmid DNA to obtain a lysate; (b) treating the lysate by a means for removing insoluble material to obtain a solute; and (c) applying the solute to differential PEG precipitations and chromatography to purify the plasmid DNA. In other embodiments of the invention, the plasmid DNA is produced with GRAS reagents; the plasmid DNA is produced in the

absence of enzymes; the plasmid DNA is produced in the absence of organic extractants; the
plasmid DNA is produced in the absence of mutagens; the lysing, treating and applying steps are
scalable to result in the large scale manufacture of the plasmid DNA; and the lysing, treating
and applying steps result in the generation of pharmaceutical grade material.
11 Claims, 1 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 1

23. Document ID: US 5545523 A
Entry 23 of 73
File: USPT
Aug 13, 1996

US-PAT-NO: 5545523
DOCUMENT-IDENTIFIER: US 5545523 A

TITLE: Methods of detecting bovine herpesvirus 1 (BHV-1) in semen by nucleic acid amplification

DATE-ISSUED: August 13, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Batt; Carl	Groton	NY	N/A	N/A
Wiedmann; Martin	Ithaca	NY	N/A	N/A
Brandon; Richard	Dryden	NY	N/A	N/A

US-CL-CURRENT: 435/6; 435/5, 435/91.1, 536/23.1, 536/24.3, 536/24.32, 536/24.33

ABSTRACT:

The present invention relates to novel compositions comprising Bovine Herpesvirus-1 (BHV-1)
specific oligonucleotides which are useful as nested primers to amplify sequences of the BHV-1
gIV gene during enzymatic nucleic acid amplification. The invention also provides a method for
the detection of BHV-1 which may be present in a clinical specimen, particularly bovine semen,
using the BHV-1 specific nested primers and enzymatic nucleic acid amplification. The present
invention also relates to a BHV-1 specific oligonucleotide which can be used as a probe to
facilitate detection of amplified products derived from BHV-1 gIV gene sequences.
8 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 3

24. Document ID: US 5498696 A
Entry 24 of 73
File: USPT
Mar 12, 1996

US-PAT-NO: 5498696
DOCUMENT-IDENTIFIER: US 5498696 A

TITLE: Sterol regulatory element binding proteins and their use in screening assays

DATE-ISSUED: March 12, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Briggs; Michael R.	Carrollton	TX	N/A	N/A
Brown; Michael S.	Dallas	TX	N/A	N/A
Goldstein; Joseph L.	Dallas	TX	N/A	N/A
Wang; Xiaodong	Dallas	TX	N/A	N/A

US-CL-CURRENT: 530/350

ABSTRACT:

A nuclear protein which binds sterol regulatory elements (SREs), such as SRE-1 of the low density
lipoprotein (LDL) receptor gene, and mediates sterol-regulated transcription of the LDL receptor
gene is disclosed. Also described are screening assay and methods for the identification of
agents capable of promoting LDL receptor gene transcription for use in reducing plasma
cholesterol and treating the various medical problems associated therewith.
4 Claims, 25 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 16

25. Document ID: US 5491224 A
Entry 25 of 73
File: USPT
Feb 13, 1996

US-PAT-NO: 5491224
DOCUMENT-IDENTIFIER: US 5491224 A

TITLE: Direct label transaminated DNA probe compositions for chromosome identification and
methods for their manufacture

DATE-ISSUED: February 13, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE

COUNTRY

Bittner; Michael L.
Naperville
IL
60563
N/A

Morrison; Larry E.
Glen Ellyn
IL
60137
N/A

Legator; Mona S.
Chicago
IL
60645
N/A

US-CL-CURRENT: 536/22.1; 435/6, 435/810, 436/501, 536/23.1, 536/24.1, 536/25.3, 536/25.4

ABSTRACT:

Direct label probe compositions which stain DNA of a preselected single chromosome or region of a chromosome of a multi-chromosomal genome are provided that comprise mixed DNA segments which are covalently bound to fluorophore groups through linking groups. The mixed DNA segments are derived from the DNA present in the preselected chromosome or chromosome region. These probe compositions can be used concurrently or sequentially with other probe compositions.
16 Claims, 0 Drawing figures
Exemplary Claim Number: 1

26. Document ID: US 5480972 A
Entry 26 of 73
File: USPT
Jan 2, 1996

US-PAT-NO: 5480972
DOCUMENT-IDENTIFIER: US 5480972 A

TITLE: Allergenic proteins from Johnson grass pollen

DATE-ISSUED: January 2, 1996

INVENTOR-INFORMATION:
NAME
CITY
STATE
ZIP CODE
COUNTRY

Avjioglu; Asil
Towson
MD
N/A
N/A

Singh; Mohan B.
Templestowe
N/A
N/A
AUX

Knox; Robert B.
North Balwyn
N/A
N/A
AUX

US-CL-CURRENT: 530/379; 435/69.3, 536/23.6

ABSTRACT:

The present invention provides a nucleic acid having a nucleotide sequence coding for Sor h I, a major allergen of Sorghum halepense, and fragments thereof. The present invention also provides purified Sor h I or at least one fragment thereof, produced in a host cell transformed with a nucleic acid sequence coding for Sor h I, or at least one fragment thereof and fragments of Sor h prepared synthetically. Sor h I and fragments thereof are useful for diagnosing, treating, and preventing allergy to Johnson grass pollen.
9 Claims, 22 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 12

27. Document ID: US 5462733 A
Entry 27 of 73
File: USPT
Oct 31, 1995

US-PAT-NO: 5462733
DOCUMENT-IDENTIFIER: US 5462733 A

TITLE: Immune system modulation using psoralens activated with visible light

DATE-ISSUED: October 31, 1995

INVENTOR-INFORMATION:
NAME
CITY
STATE
ZIP CODE
COUNTRY

Edelson; Richard L.
Westport
CT
N/A
N/A

Gasparro; Francis P.
Hamden
CT
N/A
N/A

US-CL-CURRENT: 424/93.71; 424/534, 424/577, 435/2, 604/4

ABSTRACT:

Methods and pharmaceutical compositions for modifying the immune response of a mammal are provided. The pharmaceutical compositions include a pharmaceutically acceptable carrier and a plurality of cells containing psoralen-DNA monoadducts and substantially no psoralen-DNA crosslinks. The preparation is formed by irradiating a suspension of cells with visible light radiation in the presence of psoralen.
23 Claims, 9 Drawing figures
Exemplary Claim Number: 13
Number of Drawing Sheets: 4

28. Document ID: US 5432072 A
Entry 28 of 73
File: USPT
Jul 11, 1995

US-PAT-NO: 5432072
DOCUMENT-IDENTIFIER: US 5432072 A

TITLE: Purification method for materials having nick-translation ability

DATE-ISSUED: July 11, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Brown; William E.	Pittsburgh	PA	N/A	N/A

US-CL-CURRENT: 435/194; 435/815, 435/816

ABSTRACT:

The present invention pertains to a method of purification of DNA polymerase I, and the polymerase and Nick-translation activities thereof. In one embodiment, the method of purification is directed to circumstances where there are amplified amounts of the same relative to that which is found naturally occurring. In another embodiment, the purification method is directed to shortening the time period for the purification of the same whether in an amplified amount or not as compared to the time taught in the prior art.
17 Claims, 4 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 4

29. Document ID: US 5340714 A
Entry 29 of 73
File: USPT
Aug 23, 1994

US-PAT-NO: 5340714
DOCUMENT-IDENTIFIER: US 5340714 A

TITLE: Use of nonmetallic tetrapyrrole molecules and novel signal solutions in chemiluminescent reactions and assays

DATE-ISSUED: August 23, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Katsilometes; George W.	Davis	CA	N/A	N/A

US-CL-CURRENT: 435/6; 252/700, 435/7.5, 436/518, 436/543, 436/91, 436/97

ABSTRACT:

Nonmetallic tetrapyrrole molecules are shown to catalyze the production of light by chemiluminescence in the presence of a signal solution at a pH from about 10.0 to about 14.0, having an appropriate oxidant or combination of oxidants and a luminescent reactant. The addition of an electron transport facilitator, a surfactant, a carbohydrate, and a chelating agent to the signal solution increases the output of light. These tetrapyrrole molecules are used alone or attached to haptens or macromolecules and are utilized as labels in the preparation of chemiluminescent, homogeneous or heterogeneous assays. They are also used in conjunction with other chemiluminescent label molecules to produce multiple analyte chemiluminescent assays. A chemiluminescent signal solution which comprises at a pH ranging from about 10.0 to about 14.0 trans, trans-5-(4-Nitrophenyl)-2,4-pentadienal, sodium di-2-ethylhexyl sulfosuccinate, glucose, benzyltrimethylammonium hydroxide, cumene hydroperoxide, trisodium para periodate, potassium superoxide and EDTA with or without a luminescent reactant is also disclosed.
32 Claims, 20 Drawing figures
Exemplary Claim Number: 5
Number of Drawing Sheets: 17

30. Document ID: US 5328996 A
Entry 30 of 73
File: USPT
Jul 12, 1994

US-PAT-NO: 5328996
DOCUMENT-IDENTIFIER: US 5328996 A

TITLE: Bacterial plasmin receptors as fibrinolytic agents

DATE-ISSUED: July 12, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Boyle; Michael D. P.	Whitehouse	OH	N/A	N/A
Lottenberg; Richard	Gainesville	FL	N/A	N/A
Broder; Christopher	Rockville	MD	N/A	N/A
Von Mering; Gregory	Gainesville	FL	N/A	N/A

US-CL-CURRENT: 536/23.1; 424/94.64, 530/350, 530/381, 530/388.25, 530/825, 536/23.7

ABSTRACT:

The subject invention concerns novel methods and compositions for thrombolytic therapy. More specifically, a receptor with high affinity for plasmin has been characterized, purified, cloned, and expressed. This receptor can be used in combination therapies where it is administered prior to, concurrently with, or after a plasminogen activator. Also, this receptor can be bound to plasmin and administered to humans or animals in need of fibrinolytic activity. Additionally, the invention pertains to a novel immobilized form of plasmin which

advantageously accumulates at the
point where antifibrinolytic activity is needed.
2 Claims, 1 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 1

31. Document ID: US 5234829 A
Entry 31 of 73
File: USPT
Aug 10, 1993

US-PAT-NO: 5234829
DOCUMENT-IDENTIFIER: US 5234829 A

TITLE: Purification method for materials having nick translation ability

DATE-ISSUED: August 10, 1993

INVENTOR-INFORMATION:
NAME
CITY
STATE
ZIP CODE
COUNTRY

Brown; William E.
Pittsburgh
PA
N/A
N/A

US-CL-CURRENT: 435/194; 435/815, 435/816

ABSTRACT:

The present invention pertains to a method of purification of DNA polymerase I, and the
polymerase and Nick-translation activities thereof. In one embodiment, the method of purification
is directed to circumstances where there are amplified amounts of the same relative to that which
is found naturally occurring. In another embodiment, the purification method is directed to
shortening the time period for the purification of the same whether in an amplified amount or not
as compared to the time taught in the prior art.
5 Claims, 4 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 4

32. Document ID: US 5175269 A
Entry 32 of 73
File: USPT
Dec 29, 1992

US-PAT-NO: 5175269
DOCUMENT-IDENTIFIER: US 5175269 A

TITLE: Compound and detectable molecules having an oligo- or polynucleotide with modifiable
reactive group

DATE-ISSUED: December 29, 1992

INVENTOR-INFORMATION:
NAME
CITY
STATE
ZIP CODE
COUNTRY

Stavrianopoulos; Jannis G.
New York
NY
N/A
N/A

US-CL-CURRENT: 536/26.13; 435/6

ABSTRACT:

A detectable molecule of the formula

A.sup.3 --(--X--R.sup.1 --E--Det.sup.b).sub.m

where A.sup.3 is A.sup.2 or a polymer, where A.sup.3 has at least one modifiable reactive group
selected from the group consisting of amino, hydroxy, cis OH, halides, aryl, imidazoyl, carbonyl,
carboxy, thiol or a residue comprising an activated carbon; --X-- is selected from the group
consisting of ##STR1## or a C.sub.1 -C.sub.10 branched or unbranched alkyl or aralkyl, which may
be substituted by --OH; --Y-- is a direct bond to --E--, or --Y-- is --E--R.sup.2 -- where
R.sup.2 is a C.sub.1 -C.sub.10 branched or unbranched alkyl; Z.sub.a is chlorine, bromine or
iodine; E is O, NH or an acyclic divalent sulfur atom; Det.sup.b is a chemical moiety capable of
being detected, preferably comprising biotin or a metal chelator of the formula: ##STR2## or the
4-hydroxy or acyloxy derivative thereof, where R.sup.3 is C.sub.1 -C.sub.4 alkyl or CH.sub.2
COOM, M is the same or different and selected from the group consisting of hydrogen, a metal or
non-metal cation or is C.sub.1 -C.sub.10 alkyl, aryl or aralkyl; and m is an integer from 1 to
the total number of modified reactive groups on A.sup.3. The detectable molecules are useful in
in vitro or in vivo assays or therapy.
6 Claims, 0 Drawing figures
Exemplary Claim Number: 1

33. Document ID: US 5126270 A
Entry 33 of 73
File: USPT
Jun 30, 1992

US-PAT-NO: 5126270
DOCUMENT-IDENTIFIER: US 5126270 A

TITLE: Enzyme amplification and purification

DATE-ISSUED: June 30, 1992

INVENTOR-INFORMATION:
NAME
CITY
STATE
ZIP CODE
COUNTRY

Minkley, Jr.; Edwin G.
Pittsburgh
PA
N/A
N/A

US-CL-CURRENT: 435/320.1; 435/194, 435/252.33, 435/254.2

ABSTRACT:

Restriction enzymes are used to remove from DNA a complete and undamaged structural gene coding
region for the expression of DNA polymerase I (polA) without the gene's natural promoter or with
only a significantly damaged portion of the gene's natural promoter. Also by

the use of
restriction enzymes, a segment from a plasmid cloning vector is excised at a position adjacent to
a promoter which is conditionally controllable and may be more powerful than the damaged or
removed promoter. The gene for DNA polymerase I is enzymatically cloned into said vector at the
position of said removed segment and adjacent to said conditionally controllable promoter.
Multicopies of the cloned vector are introduced into a host baterial strain (E. coli). The host
strain is then cultured so that the cell colony grows and replicates new generations containing
replicated foreign plasmid. During such said replication the activity of said controllable
promoter is repressed. After the cell colony has grown, the repression of said controllable
promoter is removed and the cells express an amplified amount of DNA polymerase I which is lethal
or inhibitory to the cells. An improved procedure is disclosed comprising a sequence of steps for
harvesting purified DNA polymerase I.
36 Claims, 3 Drawing figures
Exemplary Claim Number: 17
Number of Drawing Sheets: 4

34. Document ID: US 5089400 A
Entry 34 of 73
File: USPT
Feb 18, 1992

US-PAT-NO: 5089400
DOCUMENT-IDENTIFIER: US 5089400 A

TITLE: Polypeptides and process for the production thereof

DATE-ISSUED: February 18, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Meyer; Francois	Zurich	N/A	N/A	CHX

US-CL-CURRENT: 435/69.51; 435/252.3, 435/252.33, 435/320.1, 435/366, 435/488, 435/91.41,
435/91.51, 435/91.53, 536/23.52

ABSTRACT:

Recombinant DNA molecules and hosts transformed with them are described which produce
polypeptides displaying a human lymphoblastoid interferon activity. There are also provided
processes for the preparation of said recombinant DNA molecules, said hosts, and said
lymphoblastoid interferon-like polypeptides. The polypeptides of the invention are useful as
immunomodulators, especially as antiviral, antitumor and anticancer agents.
27 Claims, 13 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 13

35. Document ID: US 5075430 A
Entry 35 of 73
File: USPT
Dec 24, 1991

US-PAT-NO: 5075430
DOCUMENT-IDENTIFIER: US 5075430 A

TITLE: Process for the purification of DNA on diatomaceous earth

DATE-ISSUED: December 24, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Little; Michael C.	Martinez	CA	N/A	N/A

US-CL-CURRENT: 536/25.41; 423/335, 435/803, 536/127, 536/25.42

ABSTRACT:

This invention is directed to a process for the purification of plasmid and other DNA, both
single-stranded and double-stranded, by immobilizing the DNA onto diatomaceous earth in the
presence of a chaotropic agent and eluting the DNA with water or low salt buffer. The resulting
purified DNA is biologically active. Also included in the invention is a process for the
immobilization of DNA onto diatomaceous earth in the presence of a chaotropic agent.
6 Claims, 1 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 1

36. Document ID: US 5057426 A
Entry 36 of 73
File: USPT
Oct 15, 1991

US-PAT-NO: 5057426
DOCUMENT-IDENTIFIER: US 5057426 A

TITLE: Method for separating long-chain nucleic acids

DATE-ISSUED: October 15, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Henco; Karsten	Erkrath	N/A	N/A	DEX
Stichel; Arndt	Duesseldorf	N/A	N/A	DEX
Colpan; Metin	Erkrath	N/A	N/A	DEX

US-CL-CURRENT: 435/270; 536/25.4, 536/25.41

ABSTRACT:

A method for the separation of long-chain nucleic acids from other substances in solutions containing nucleic acids and other materials, comprising fixing long-chain nucleic acids in a nucleic acid-containing solution onto a porous matrix, washing the porous matrix to separate the other substances from the long-chain nucleic acids, and removing the fixed long-chain nucleic acids from the porous matrix is disclosed. A device for carrying out the method of the claimed invention is also described.

21 Claims, 4 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 3

37. Document ID: US 5013831 A
Entry 37 of 73
File: USPT
May 7, 1991

US-PAT-NO: 5013831
DOCUMENT-IDENTIFIER: US 5013831 A

TITLE: Detectable molecules, method of preparation and use

DATE-ISSUED: May 7, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stavrianopoulos; Jannis G.	New York	NY	N/A	N/A

US-CL-CURRENT: 536/25.32; 435/6, 536/26.7, 536/26.72, 536/26.8

ABSTRACT:

A detectable molecule of the formula

A.sup.3 --(--X--R.sup.1 --E--Det.sup.b).sub.m

where A.sup.3 is A.sup.2 or a polymer, where A.sup.3 has at least one modifiable reactive group selected from the group consisting of amino, hydroxy, cis OH, halides, aryl, imidazoyl, carbonyl, carboxy, thiol or a residue comprising an activated carbon; --X-- is selected from the group consisting of ##STR1## a C.sub.1 -C.sub.10 branched or unbranched alkyl or aralkyl, which may be substituted by --OH; --Y-- is a direct bond to --E--, or --Y-- is --E--R.sup.2 -- where R.sup.2 is a C.sub.1 -C.sub.10 branched or unbranched alkyl; Z.sub.a is chlorine, bromine or iodine; E is O, NH or an acyclic divalent sulfur atom; Det.sup.b is a chemical moiety capable of being detected, preferably comprising biotin or a metal chelator of the formula: ##STR2## or the 4-hydroxy or acyloxy derivative thereof, where R.sup.3 is C.sub.1 -C.sub.4 alkyl or CH.sub.2 COOM, M is the same or different and selected from the group consisting of hydrogen, a metal or non-metal cation or is C.sub.1 -C.sub.10 alkyl, aryl or aralkyl; and m is an integer from 1 to the total number of modified reactive groups on A.sup.3. The detectable molecules are useful in in vitro or in vivo assays or therapy.

2 Claims, 0 Drawing figures
Exemplary Claim Number: 1

38. Document ID: US 5004689 A
Entry 38 of 73
File: USPT
Apr 2, 1991

US-PAT-NO: 5004689
DOCUMENT-IDENTIFIER: US 5004689 A

TITLE: DNA sequences, recombinant DNA molecules and processes for producing human gamma interferon-like polypeptides in high yields

DATE-ISSUED: April 2, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fiers; Walter C.	Destelbergen	N/A	N/A	BEX
Allet; Bernard	Onex	N/A	N/A	CHX

US-CL-CURRENT: 435/69.51; 435/252.3, 435/252.33, 435/320.1

ABSTRACT:

DNA sequences, recombinant DNA molecules and hosts transformed with them which produce polypeptides displaying a biological or immunological activity of gamma interferon. The genes coding for these polypeptides and methods of making and using these DNA sequences, molecules, hosts, genes and polypeptides are disclosed. The DNA sequences of this invention are further characterized by expression control sequences which permit the production of gamma interferon in high yields. More particularly, these expression control sequences comprise the .lambda. P.sub.L promoter, and more preferably, a trp-derived expression control sequence containing the sequence ATCGATACT between the Shine-Dalgarno sequence and the translational start signal. In appropriate hosts, these DNA sequences and recombinant DNA molecules permit the production and identification of genes and polypeptides displaying a biological or immunological activity of gamma interferon and their use in antiviral, antitumor or anticancer, and immunomodulation agents and methods.

12 Claims, 12 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 12

39. Document ID: US 5002885 A
Entry 39 of 73
File: USPT
Mar 26, 1991

US-PAT-NO: 5002885
DOCUMENT-IDENTIFIER: US 5002885 A

TITLE: Detectable molecules, method preparation and use

DATE-ISSUED: March 26, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stavrianopoulos; Jannis G.	New York	NY	N/A	N/A

US-CL-CURRENT: 435/188; 435/6, 435/7.5, 435/7.9, 435/7.92, 436/548, 530/350, 530/391.5, 530/402, 536/1.11, 536/102, 536/23.1, 536/24.3, 536/25.5, 536/55.1, 536/56

ABSTRACT:

A detectable molecule of the formula

A.sup.3 --(--X--R.sup.1 --E--Det.sup.b).sub.m

where A.sup.3 is A.sup.2 or a polymer, where A.sup.3 has at least one modifiable reactive group selected from the group consisting of amino, hydroxy, cis OH, halides, aryl, imidazoyl, carbonyl, carboxy, thiol or a residue comprising an activated carbon; --X-- is selected from the group consisting of ##STR1## a C.sub.1 -C.sub.10 branched or unbranched alkyl or aralkyl, which may be substituted by --OH; --Y-- is a direct bond to --E--, or --Y-- is --E--R.sup.2 -- where R.sup.2 is a C.sub.1 -C.sub.10 branched or unbranched alkyl; Z.sub.a is chlorine, bromine or iodine; E is O, NH or an acylic divalent sulfur atom; Det.sup.b is a chemical moiety capable of being detected, preferably comprising biotin or a metal chelator of the formula: ##STR2## or the 4-hydroxy or acyloxy derivative thereof, where R.sup.3 is C.sub.1 -C.sub.4 alkyl or CH.sub.2 COOM, M is the same or different and selected from the group consisting of hydrogen, a metal or non-metal cation or is C.sub.1 -C.sub.10 alkyl, aryl or aralkyl; and m is an integer from 1 to the total number of modified reactive groups on A.sup.3. The detectable molecules are useful in in vitro or in vivo assays or therapy.

24 Claims, 0 Drawing figures
Exemplary Claim Number: 1,2,3

40. Document ID: US 4985243 A
Entry 40 of 73
File: USPT
Jan 15, 1991

US-PAT-NO: 4985243
DOCUMENT-IDENTIFIER: US 4985243 A

TITLE: Composition and method for protecting against diseases caused by microorganisms

DATE-ISSUED: January 15, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Faulds; Daryl H.	Millbrae	CA	N/A	N/A
Vishoot; Mini	Millbrae	CA	N/A	N/A

US-CL-CURRENT: 424/164.1; 424/264.1, 424/94.6, 435/199, 435/870

ABSTRACT:

A vaccine for protecting against a disease caused by a microorganism which does not synthesize nucleic acid precursors such as a Micoplasma organism, which contains nuclease and/or a nuclease fragment or derivative which produces antibodies which recognize nuclease secreted or available on the surface of the microorganism against which protection is to be afforded. A vaccine may also be prepared from an antibody or fragment or derivative thereof which recognizes such nuclease of such microorganism.

14 Claims, 0 Drawing figures
Exemplary Claim Number: 1

41. Document ID: US 4952685 A
Entry 41 of 73
File: USPT
Aug 28, 1990

US-PAT-NO: 4952685
DOCUMENT-IDENTIFIER: US 4952685 A

TITLE: Detectable molecules, method of preparation and use

DATE-ISSUED: August 28, 1990

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stavrianopoulos; Jannis G.	New York	NY	N/A	N/A

US-CL-CURRENT: 536/25.32; 435/6, 534/551, 534/775, 536/26.21, 536/26.8

ABSTRACT:

A detectable molecule of the formula

A.sup.3 --(--X--R.sup.1 --E--Det.sup.b).sub.m

where A.sup.3 is A.sup.2 or a polymer, where A.sup.3 has at least one modifiable reactive group selected from the group consisting of amino, hydroxy, cis OH, halides, aryl, imidazoyl, carbonyl, carboxy, thiol or a residue comprising an activated carbon; --X-- is selected from the group consisting of ##STR1## a C.sub.1 -C.sub.10 branched or unbranched alkyl or aralkyl, which may be substituted by --OH; --Y-- is a direct bond to --E--, or --Y-- is --E--R.sup.2

-- where R.sup.2
is a C.sub.1 -C.sub.10 branched or unbranched alkyl; Z.sub.a is chlorine, bromine or iodine; E is
O, NH or an acyclic divalent sulfur atom; Det.sup.b is a chemical moiety capable of being
detected, preferably comprising biotin or a metal chelator of the formula: ##STR2## or the
4-hydroxy or acyloxy derivative thereof, where R.sup.3 is C.sub.1 -C.sub.4 alkyl or CH.sub.2
COOM, M is the same or different and selected from the group consisting of hydrogen, a metal or
non-metal cation or is C.sub.1 -C.sub.10 alkyl, aryl or aralkyl; and m is an integer from 1 to
the total number of modified reactive groups on A.sup.3. The detectable molecules are useful in
vitro or in vivo assays or therapy.
3 Claims, 0 Drawing figures
Exemplary Claim Number: 1

42. Document ID: US 4943523 A
Entry 42 of 73
File: USPT
Jul 24, 1990

US-PAT-NO: 4943523
DOCUMENT-IDENTIFIER: US 4943523 A

TITLE: Detectable molecules, method of preparation and use

DATE-ISSUED: July 24, 1990

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stavrianopoulos; Jannis G.	New York	NY	N/A	N/A

US-CL-CURRENT: 435/7.5; 436/537, 436/804, 530/389.2, 530/391.5, 534/11, 534/12, 534/13, 534/14,
536/17.1

ABSTRACT:

A detectable molecule of the formula

A.sup.3 --(--X--R.sup.1 --E--Det.sup.b).sub.m

where A.sup.3 is A.sup.2 or a polymer, where A.sup.3 has at least one modifiable reactive group
selected from the group consisting of amino, hydroxy, cis OH, halides, aryl, imidazoyl, carbonyl,
carboxy, thiol or a residue comprising an activated carbon; --X-- is selected from the group
consisting of ##STR1## a C.sub.1 -C.sub.10 branched or unbranched alkyl or aralkyl, which may be
substituted by --OH; --Y-- is a direct bond to --E--, or --Y-- is --E--R.sup.2 -- where R is a
C.sub.1 -C.sub.10 branched or unbranched alkyl; Z.sub.a is chlorine, bromine or iodine; E is O,
NH or an acyclic divalent sulfur atom; Det.sup.b is a chemical moiety capable of being detected,
preferably comprising biotin or a metal chelator of the formula: ##STR2## or the 4-hydroxy or
acyloxy derivative thereof, where R.sup.3 is C.sub.1 -C.sub.4 alkyl or CH.sub.2 COOM, M is the
same or different and selected from the group consisting of hydrogen, a metal or non-metal cation
or is C.sub.1 -C.sub.10 alkyl, aryl or aralkyl; and m is an integer from 1 to the total number of
modified reactive groups on A.sup.3. The detectable molecules are useful in in vitro or in vivo
assays or therapy.
42 Claims, 0 Drawing figures
Exemplary Claim Number: 1,2

43. Document ID: US 4886756 A
Entry 43 of 73
File: USPT
Dec 12, 1989

US-PAT-NO: 4886756
DOCUMENT-IDENTIFIER: US 4886756 A

TITLE: Novel restriction endonuclease SplI and process for the production of the same

DATE-ISSUED: December 12, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kawamura; Masahide	Chiba	N/A	N/A	JPX
Sakakibara; Masaki	Chiba	N/A	N/A	JPX
Watanabe; Teruo	Chiba	N/A	N/A	JPX
Obauashi; Akira	Uji	N/A	N/A	JPX
Hiraoka; Nobutsugu	Mukou	N/A	N/A	JPX
Kita; Keiko	Kyoto	N/A	N/A	JPX

US-CL-CURRENT: 435/199; 435/183, 435/195

ABSTRACT:

A novel restriction endonuclease SplI which has the following physicochemical properties:

(1) recognizing the following base sequences in double-stranded deoxyribonucleic acid ##STR1##
and cleaving said sequences in the phosphodiester bonds between C and G as indicated with the
vertical arrows to produce DNA fragments having one strand comprising four bases at the
5'-terminal;

(2) cleaving double-stranded deoxyribonucleic acid .lambda.-DNA in one position, Col El in two

positions and .phi.x 174 RF in two positions;

(3) being activated with 5 to 20 mM Mg.sup.2+ ; and

(4) exhibiting an activity at a NaCl concentration of 0 to 200 mM;

and a process for the production of the restriction endonuclease SplI which comprises culturing a
restriction endonuclease SplI-producing alga belonging to the genus Spirulina, collecting the
cells, obtaining a cell-free extract therefrom the separating and purifying the restriction
endonuclease SplI.
2 Claims, 0 Drawing figures
Exemplary Claim Number: 1

44. Document ID: US 4849505 A
Entry 44 of 73
File: USPT
Jul 18, 1989

US-PAT-NO: 4849505
DOCUMENT-IDENTIFIER: US 4849505 A

TITLE: Detectable molecules, method of preparation and use

DATE-ISSUED: July 18, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stavrianopoulos; Jannis G.	New York	NY	N/A	N/A

US-CL-CURRENT: 530/300; 435/180, 435/5, 435/6, 435/7.21, 435/7.5, 436/518, 436/531, 436/532,
530/350, 530/402, 530/405, 536/24.3, 536/25.32, 536/55.1

ABSTRACT:

A detectable molecule of the formula

A.sup.3 --(--X--R.sup.1 --E--Det.sup.b).sub.m

where A.sup.3 is A.sup.2 or a polymer, where A.sup.3 has at least one modifiable reactive group
selected from the group consisting of amino, hydroxy, cis OH, halides, aryl, imidazoyl, carbonyl,
carboxy, thiol or a residue comprising an activated carbon; --X-- is selected from the group
consisting of ##STR1## --R.sup.1 -- is ##STR2## or a C.sub.1 -C.sub.10 branched or unbranched
alkyl or aralkyl, which may be substituted by --OH; --Y-- is a direct bond to --E--, or --Y-- is
--E--R.sup.2 -- where R.sup.2 is a C.sub.1 -C.sub.10 branched or unbranched alkyl; Z.sub.a is
chlorine, bromine or iodine; E is O, NH or an acyclic divalent sulfur atom; Det.sup.b is a
chemical moiety capable of being detected, preferably comprising biotin or a metal chelator of
the formula: ##STR3## or the 4-hydroxy or acyloxy derivatives thereof, where R.sup.3 is C.sub.1
-C.sub.4 alkyl or CH.sub.2 COOM, M is the same or different and selected from the group
consisting of hydrogen, a metal or non-metal cation or is C.sub.1 -C.sub.10 alkyl, aryl or
aralkyl; and m is an integer from 1 to the total number of modified reactive groups on A.sup.3.
The detectable molecules are useful in in vitro or in vivo assays or therapy.
6 Claims, 0 Drawing figures
Exemplary Claim Number: 1,4

45. Document ID: US 4849208 A
Entry 45 of 73
File: USPT
Jul 18, 1989

US-PAT-NO: 4849208
DOCUMENT-IDENTIFIER: US 4849208 A

TITLE: Detectable molecules, method of preparation and use

DATE-ISSUED: July 18, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stavrianopoulos; Jannis G.	New York	NY	N/A	N/A

US-CL-CURRENT: 424/1.53; 424/9.34, 424/9.35, 424/9.36, 600/3, 600/431, 600/436

ABSTRACT:

A detectable molecule of the formula

A.sup.3 --(--X--R.sup.1 --E--Det.sup.b).sub.m

wherein A.sup.3 is A.sup.2 or a polymer, where A.sup.3 has at least one modifiable reactive group
selected from the group consisting of amino, hydroxy, cis .OH, halides, aryl, imidazoly,
carbonyl, carboxy, thiol or a residue comprising an activated carbon; --X-- is selected from the
group consisting of ##STR1## a C.sub.1 -C.sub.10 branched or unbranched alkyl or aralkyl, which
may be substituted by --OH; --Y-- is a direct bond to --E--, or --Y-- is --E--R.sup.2 -- where
R.sup.2 is a C.sub.1 -C.sub.10 branched or unbranched alkyl; Z.sub.a is chlorine, bromine or
iodine; E is O, NH or an acyclic divalent sulfur atom; Det.sup.b is a chemical moiety capable of
being detected, preferably comprising biotin or a metal chelator of the formula: ##STR2## or the
4-hydroxy or acyloxy derivative thereof, where R.sup.3 is C.sub.1 -C.sub.4 alkyl or CH.sub.2
COOM, M is the same or different and selected from the group consisting of hydrogen, a metal or
non-metal cation or is C.sub.1 -C.sub.10 alkyl, aryl or aralkyl; and mm is an integer from 1 to
the total number of modified reactive groups on A.sup.3. The detectable molecules are useful in
in vitro or in vivo assays or therapy.
4 Claims, 0 Drawing figures
Exemplary Claim Number: 1

46. Document ID: US 4843122 A
Entry 46 of 73
File: USPT
Jun 27, 1989

US-PAT-NO: 4843122

DOCUMENT-IDENTIFIER: US 4843122 A

TITLE: Detectable molecules, method of preparation and use

DATE-ISSUED: June 27, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stavrianopoulos; Jannis G.	New York	NY	N/A	N/A

US-CL-CURRENT: 525/61; 525/331.3, 525/333.2, 525/376, 525/453, 530/300, 530/345, 530/350, 530/402, 530/405, 536/25.32, 536/55.1

ABSTRACT:

A detectable molecule of the formula

A.sup.3 --(--X--R.sup.1 --E--Det.sup.b).sub.m

where A.sup.3 is A.sup.2 or a polymer, where A.sup.3 has at least one modifiable reactive group selected from the group consisting of amino, hydroxy, cis .OH, halides, aryl, imidazoyl, carbonyl, carboxy, thiol or a residue comprising an activated carbon; --X-- is selected from the group consisting of ##STR1## a C.sub.1 -C.sub.10 branched or unbranched alkyl or aralkyl, which may be substituted by --OH; --Y-- is a direct bond to --E--, or --Y-- is --E--R.sup.2 -- where R.sup.2 is a C.sub.1 -C.sub.10 branched or unbranched alkyl; Z.sub.a is chlorine, bromine or iodine; E is O, NH or an acylic divalent sulfur atom; Det.sup.b is a chemical moiety capable of being detected, preferably comprising biotin or a metal chelator of the formula: ##STR2## or the 4-hydroxy or acyloxy derivative thereof, where R.sup.3 is C.sub.1 -C.sub.4 alkyl or CH.sub.2 COOM, M is the same or different and selected from the group consisting of hydrogen, a metal or non-metal cation or is C.sub.1 -C.sub.10 alkyl, aryl or aralkyl; and m is an integer from 1 to the total number of modified reactive groups on A.sup.3. The detectable molecules are useful in in vitro or in vivo assays or therapy.

13 Claims, 0 Drawing figures

Exemplary Claim Number: 1

47. Document ID: US 4830969 A

Entry 47 of 73

File: USPT

May 16, 1989

US-PAT-NO: 4830969

DOCUMENT-IDENTIFIER: US 4830969 A

TITLE: Process for the rapid and simple isolation of nucleic acids

DATE-ISSUED: May 16, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Holmes; David S.	Troy	NY	N/A	N/A

US-CL-CURRENT: 435/259; 426/60, 435/264, 435/267, 435/270, 435/272, 435/320.1, 435/820, 435/91.1, 435/91.32, 435/91.33, 435/91.4, 530/344, 530/412, 530/417, 530/419, 530/423, 530/820, 536/25.4, 536/25.41

ABSTRACT:

A process for the separation from other cellular materials of heat agglomeration resistant water soluble nitrogen containing organic compounds such as plasmids, RNA's, mitochondrial DNA's, viral DNA's, chloroplast DNA's, other episomal DNA's and certain proteins. The process comprises heating cellular materials in a solution of lysing agent to lyse the desired cells and to agglomerate water soluble nitrogen containing compounds such as certain chromosomal DNA's which are not resistant to agglomeration; centrifuging the resulting product to remove water soluble agglomerated materials; separating the supernatant liquid and precipitating the water soluble agglomeration resistant organic compounds with a water soluble precipitant. The process also includes separating the agglomeration resistant water soluble nitrogen containing compounds from each other by means of exclusion chromotography.

35 Claims, 0 Drawing figures

Exemplary Claim Number: 1

48. Document ID: US 4767708 A

Entry 48 of 73

File: USPT

Aug 30, 1988

US-PAT-NO: 4767708

DOCUMENT-IDENTIFIER: US 4767708 A

TITLE: Enzyme amplification and purification

DATE-ISSUED: August 30, 1988

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Minkley, Jr.; Edwin G.	Pittsburgh	PA	N/A	N/A
Brown; William E.	Pittsburgh	PA	N/A	N/A

US-CL-CURRENT: 435/194; 435/252.33, 435/254.2, 435/320.1, 435/483

ABSTRACT:

Restriction enzymes are used to remove from DNA a complete and undamaged structural gene coding region for the expression of DNA polymerase I (polA) without the gene's natural promoter or with

only a significantly damaged portion of the gene's natural promoter. Also by the use of
restriction enzymes, a segment from a plasmid cloning vector is excised at a position adjacent to
a promoter which is conditionally controllable and may be more powerful than the damaged or
removed promoter. The gene for DNA polymerase I is enzymatically cloned into said vector at the
position of said removed segment and adjacent to said conditionally controllable promoter.
Multicopies of the cloned vector are introduced into a host baterial strain (E. coli). The host
strain is then cultured so that the cell colony grows and replicates new generations containing
replicated foreign plasmid. During such said replication the activity of said controllable
promoter is repressed. After the cell colony has grown, the repression of said controllable
promoter is removed and the cells express an amplified amount of DNA polymerase I which is lethal
or inhibitory to the cells. An improved procedure is disclosed comprising a sequence of steps for
harvesting purified DNA polymerase I.
45 Claims, 3 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 4

49. Document ID: US 4729955 A
Entry 49 of 73
File: USPT
Mar 8, 1988

US-PAT-NO: 4729955
DOCUMENT-IDENTIFIER: US 4729955 A

TITLE: Method of producing reverse transcriptase

DATE-ISSUED: March 8, 1988

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kodama; Michi	Ibaraki	N/A	N/A	JPX
Sekiguchi; Kiichi	Ibaraki	N/A	N/A	JPX
Kubo; Masanori	Kagoshima	N/A	N/A	JPX

US-CL-CURRENT: 435/183; 435/948

ABSTRACT:

A method of producing reverse transcriptase, which comprises isolating a fraction containing
retrovirus from a tissue culture fluid supernatant of retrovirus producing cells which are able
to grow and propagate in vitro, treating said fraction at least once by sucrose density gradient
centrifugation to thereby obtain a purified retrovirus, and extracting reverse transcriptase from
said purified retrovirus.

14 Claims, 6 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 5

50. Document ID: US 4720385 A
Entry 50 of 73
File: USPT
Jan 19, 1988

US-PAT-NO: 4720385
DOCUMENT-IDENTIFIER: US 4720385 A

TITLE: Protein compositions substantially free from infectious agents

DATE-ISSUED: January 19, 1988

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lembach; Kenneth J.	Danville	CA	N/A	N/A

US-CL-CURRENT: 424/176.1; 514/2, 514/21, 514/802, 530/364, 530/380, 530/381, 530/382 , 530/383,
530/384, 530/386, 530/388.1, 530/390.1, 530/392, 530/393, 530/397, 530/403, 530/404, 530/405

ABSTRACT:

Compositions containing therapeutically or immunologically active proteins are rendered
substantially free from infectious agents such as viable viruses and bacteria without substantial
loss of therapeutic or immunologic activity by mixing the protein composition with a complex
formed from transition metal ions, such as copper ions, and an angularly-fused, polynuclear
heterocyclic arene having two nitrogen atoms in a "cis-ortho" relationship, such as
phenanthroline, and a reducing agent such as a thiol or ascorbic acid or ascorbate salt or
mixtures of ascorbic acid or ascorbate with a thiol in amounts and at a temperature and for a
time sufficient to inactivate substantially all of the viruses and bacteria contained therein.
Compositions containing therapeutically active proteins substantially free from viral and
bacterial infectivity, which have heretofore been unattainable, can be prepared by the method of
the invention.
24 Claims, 0 Drawing figures
Exemplary Claim Number: 1

51. Document ID: US 4707440 A
Entry 51 of 73
File: USPT
Nov 17, 1987

US-PAT-NO: 4707440
DOCUMENT-IDENTIFIER: US 4707440 A

TITLE: Nucleic acid hybridization assay and detectable molecules useful in such assay

DATE-ISSUED: November 17, 1987

INVENTOR-INFORMATION:
NAME CITY STATE ZIP CODE COUNTRY
Stavrianopoulos; Jannis G. New York NY N/A N/A

US-CL-CURRENT: 435/6; 536/24.3, 536/25.3, 536/26.14, 536/26.71

ABSTRACT:

A detectable molecule of the formula

A.sup.3 --(--X--R.sup.1 --E--Det.sup.b).sub.m

where A.sup.3 is A.sup.2 or a polymer, where A.sup.3 has at least one modifiable reactive group selected from the group consisting of amino, hydroxy, cis OH, halides, aryl, imidazoyl, carbonyl, carboxy, thiol or a residue comprising an activated carbon; --X-- is selected from the group consisting of ##STR1## --R.sup.1 -- is ##STR2## or a C.sub.1 -C.sub.10 branched or unbranched alkyl or aralkyl, which may be substituted by --OH; --Y-- is a direct bond to --E--, or --Y-- is --E--R.sup.2 -- where R.sup.2 is a C.sub.1 -C.sub.10 branched or unbranched alkyl; Z.sub.a is chlorine, bromine or iodine; E is O, NH or an acyclic divalent sulfur atom; Det.sup.b is a chemical moiety capable of being detected, preferably comprising biotin or a metal chelator of the formula: ##STR3## or the 4-hydroxy or acyloxy derivative thereof, where R.sup.3 is C.sub.1 -C.sub.4 alkyl or CH.sub.2 COOM, M is the same or different and selected from the group consisting of hydrogen, a metal or non-metal cation or is C.sub.1 -C.sub.10 alkyl, aryl or aralkyl; and m is an integer from 1 to the total number of modified reactive groups on A.sup.3.

The detectable molecules are useful in in virto or in vivo assays or therapy.

28 Claims, 0 Drawing figures

Exemplary Claim Number: 1,28

52. Document ID: US 4672032 A
Entry 52 of 73 File: USPT Jun 9, 1987

US-PAT-NO: 4672032
DOCUMENT-IDENTIFIER: US 4672032 A

TITLE: Dental enamel production

DATE-ISSUED: June 9, 1987

INVENTOR-INFORMATION:
NAME CITY STATE ZIP CODE COUNTRY
Slavkin; Harold C. Beverly Hills CA N/A N/A
Snead; Malcolm L. Los Angeles CA N/A N/A
Woo; Savio L. C. Houston TX N/A N/A
Zeichner-David; Margarita Santa Monica CA N/A N/A

US-CL-CURRENT: 435/68.1; 424/49, 424/52, 424/57, 424/602, 424/676, 435/212, 435/219, 435/69.1, 530/350, 930/10

ABSTRACT:

Methods are provided for the formation of dental enamel crystals in biosynthetic matrix form by the nucleation of calcium solutions with enamel proteins and for the use of such enamel crystals as restorative material.

6 Claims, 10 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 10

53. Document ID: US 4621055 A
Entry 53 of 73 File: USPT Nov 4, 1986

US-PAT-NO: 4621055
DOCUMENT-IDENTIFIER: US 4621055 A

TITLE: Process for producing biologically active factors

DATE-ISSUED: November 4, 1986

INVENTOR-INFORMATION:
NAME CITY STATE ZIP CODE COUNTRY
Theurer; Karl 7302 Ostfildern 1 (Ruit) N/A N/A DEX

US-CL-CURRENT: 435/68.1; 435/70.3

ABSTRACT:

A process for producing biologically active factors from a substrate, in the form of cell homogenates of organ tissues, of microorganisms, plant components and/or body fluids. To this end, the substrate, in an aqueous form and freed of accompanying particulate substances, is selectively separated by affinity chromatography using a biological sorbent, in the case of which at least one nucleic acid (desoxyribonucleic and/or ribonucleic acid) or at least one protein or peptide is coupled to a carrier substance; in the primary eluate components having no affinity are present, while the active factors (which have an affinity) are secondarily eluated. By binding nucleic acids or proteins from a given origin to a carrier, active factors with special properties such as tumor inhibiting substances, or stimulating substances

may be positively
produced.
4 Claims, 1 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 1

54. Document ID: US 4621061 A
Entry 54 of 73
File: USPT
Nov 4, 1986

US-PAT-NO: 4621061
DOCUMENT-IDENTIFIER: US 4621061 A

TITLE: Plasmid p SG 2 and process for its preparation

DATE-ISSUED: November 4, 1986

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Puhler; Alfred	Bielefeld	N/A	N/A	DEX
Wohlleben; Wolfgang	Bielefeld	N/A	N/A	DEX
Leineweber; Michael	Hofheim am Taunus	N/A	N/A	DEX

US-CL-CURRENT: 435/91.4; 435/320.1, 536/23.1

ABSTRACT:

The new streptomyces plasmid p SG 2, having a molecular weight of 9.2 megadaltons, a contour
length of 4.58 .mu.m and a molecular length of about 13.8 kilobases, is described, together with
its preparation from a culture of "Streptomyces ghanaensis" ATCC 14 672.
3 Claims, 1 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 1

55. Document ID: US 4591564 A
Entry 55 of 73
File: USPT
May 27, 1986

US-PAT-NO: 4591564
DOCUMENT-IDENTIFIER: US 4591564 A

TITLE: Transferase enzymes which modify the 3'-termini of ribonucleic acid and methods

DATE-ISSUED: May 27, 1986

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Watson; Kenneth F.	Lolo	MT	N/A	N/A

US-CL-CURRENT: 435/194; 435/6, 435/91.3

ABSTRACT:

Three ribonucleotidyl terminal transferase enzymes are disclosed which modify the 3'-termini of
ribonucleic acid (RNA) molecules by the addition of ribonucleotide units using ribonucleoside
triphosphates as substrates. These terminal transferase activities are distinguishable by the
specific ribonucleotide (e.g. AMP, CMP, or UMP) transferred to the 3'-hydroxyl terminus of an RNA
primer. Also provided is a method for the 3'-terminal modification of RNA molecules by these
enzymes and sequencing of RNA from its 3'-termini. The methods provide a convenient and efficient
procedure for 3'-terminal modification (homopolymer tailing) of RNA required for synthesis of
complete complementary DNA (cDNA) copies or double-stranded DNA gene copies by
retrovirus-associated reverse transcriptase. Using the enzymes of the invention, RNA can also be
radiolabelled to very high levels for molecular hybridization.
5 Claims, 0 Drawing figures
Exemplary Claim Number: 1

56. Document ID: US 4534972 A
Entry 56 of 73
File: USPT
Aug 13, 1985

US-PAT-NO: 4534972
DOCUMENT-IDENTIFIER: US 4534972 A

TITLE: Protein compositions substantially free from infectious agents

DATE-ISSUED: August 13, 1985

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lembach; Kenneth J.	Danville	CA	N/A	N/A

US-CL-CURRENT: 424/176.1; 514/2, 514/21, 514/802, 530/364, 530/380, 530/381, 530/382 , 530/383,
530/384, 530/386, 530/390.1, 530/392, 530/393, 530/394, 530/397, 530/403, 530/404, 530/405,
530/806, 530/825, 530/826

ABSTRACT:

Compositions containing therapeutically or immunologically active proteins are rendered
substantially free from infectious agents such as viable viruses and bacteria without substantial
loss of therapeutic or immunologic activity by mixing the protein composition with a complex
formed from source of transition metal ions, such as copper ions, and an angularly-fused,

polynuclear heterocyclic arene having two nitrogen atoms in a "cis-ortho" relationship, such as
phenanthroline, and a reducing agent such as a thiol in amounts and at a temperature and for a
time sufficient to inactivate substantially all of the viruses and bacteria contained therein.
Compositions containing therapeutically active proteins substantially free from viral and
bacterial infectivity, which have heretofore been unattainable, can be prepared by the method of
the invention.
18 Claims, 0 Drawing figures
Exemplary Claim Number: 1

57. Document ID: US 4506014 A
Entry 57 of 73
File: USPT
Mar 19, 1985

US-PAT-NO: 4506014
DOCUMENT-IDENTIFIER: US 4506014 A

TITLE: Plasmid pAC 1, a process for obtaining it and its use

DATE-ISSUED: March 19, 1985

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Esser; Karl	Bochum	N/A	N/A	DEX
Minuth; Walter	Frankfurt am Main	N/A	N/A	DEX

US-CL-CURRENT: 435/91.41; 435/320.1, 435/49, 435/91.4

ABSTRACT:

Plasmid pAC 1, which is obtained from Acremonium chrysogenum ATCC 14553 and has a contour length
of about 6.7 .mu.m and a molecular size of about 20.9 kilobases (=kb), a process for obtaining it
and its use for preparing a hybrid vector which promotes the biosynthesis of .beta.-lactam
antibiotics.
4 Claims, 0 Drawing figures
Exemplary Claim Number: 1

58. Document ID: US 4448883 A
Entry 58 of 73
File: USPT
May 15, 1984

US-PAT-NO: 4448883
DOCUMENT-IDENTIFIER: US 4448883 A

TITLE: Method of making lyophilized terminal deoxynucleotidyl transferase

DATE-ISSUED: May 15, 1984

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Case; Richard V.	Midland	TX	N/A	N/A

US-CL-CURRENT: 435/194; 435/188

ABSTRACT:

Heat sensitive terminal deoxynucleotidyl transferase is stabilized by lyophilizing a solution of
the enzyme, said solution prior to freeze-drying having a carefully controlled pH, an ionic
concentration of at least 0.05 mole/liter and a protein concentration of greater than 0.3
gram/liter.
7 Claims, 0 Drawing figures
Exemplary Claim Number: 1

59. Document ID: US 4379839 A
Entry 59 of 73
File: USPT
Apr 12, 1983

US-PAT-NO: 4379839
DOCUMENT-IDENTIFIER: US 4379839 A

TITLE: Method for detecting cancer

DATE-ISSUED: April 12, 1983

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Spiegelman; Sol	New York	NY	N/A	N/A

US-CL-CURRENT: 435/5; 435/960, 436/172

ABSTRACT:

The existence and status of cancers in humans can be detected by assaying for viral related
proteins in plasma samples. Suitable viral related proteins include the enzyme RNA-dependent DNA
polymerase (reverse transcriptase) or an extracellular tumor associated protein which is of viral
origin. The aforesaid enzyme and tumor associated protein are immunologically cross-reactive with
antibodies to Mason-Pfizer Monkey Virus (MPMV) and murine mammary tumor virus (MMTV) which
thereby provide a convenient source of reagents for the instant method.
14 Claims, 0 Drawing figures
Exemplary Claim Number: 1

60. Document ID: JP 03227905 A
Entry 60 of 73
File: JPAB

Oct 8, 1991

PUB-NO: JP403227905A
DOCUMENT-IDENTIFIER: JP 03227905 A
TITLE: PLANT REGENERATION PROMOTER

PUBN-DATE: October 8, 1991

INVENTOR-INFORMATION:
NAME
WAKE, HITOSHI
HISHINUMA, KIYOSHI
SAITO, YOKO
UMETSU, HIRONORI
MATSUNAGA, TADASHI

INT-CL (IPC): A01N 63/00; A01N 63/02

ABSTRACT:

PURPOSE: To provide the title promoter to be used in incubating plant tissues or organs or culture cells, containing at least one of the nucleic acid, protein and polysaccharide fractions in the culture filtrate and/or extract for photosynthetic prokaryote.

CONSTITUTION: Photosynthetic prokaryote (e.g. cyanobacterium, photosynthetic bacterium) is put to outdoor open culture taking advantage of tank culture or sunlight using a medium containing inorganic salts etc., and the resulting culture solution is centrifuged or filtered or obtain a culture filtrate. The extract for the photosynthetic prokaryote can be obtained by crushing, as appropriate, the resultant microbial cells followed by contact with a solvent (pref. an aqueous solvent). The filtrate or extract is then put to a fractionation such as fractional precipitation, purification by gel permeation or purification using ion exchange material into nucleic acid, protein and/or polysaccharide fraction(s), which is (are) either directly used or used after concentration or dilution as the objective promoter. Use of the present promoter can promote adventitious embryo formation and plant regeneration.

61. Document ID: JP 01066127 A
Entry 61 of 73
File: JPAB
Mar 13, 1989

PUB-NO: JP401066127A
DOCUMENT-IDENTIFIER: JP 01066127 A
TITLE: ANTITUMOR AGENT

PUBN-DATE: March 13, 1989

INVENTOR-INFORMATION:
NAME
MIZUNO, TAKU
ITO, HITOSHI
SHIMURA, KEISHIRO
KAWADE, MITSUO
KAWAGISHI, HIROKAZU
HAGIWARA, TOSHIHIKO
NAKAMURA, TAKUJI

INT-CL (IPC): A61K 37/02; A61K 35/84

ABSTRACT:

PURPOSE: To obtain an antitumor agent having antitumor action, containing a nucleic acid component of a fruit body of HIMEMATSUTAKE as an active ingredient.

CONSTITUTION: An antitumor agent containing a nucleic acid component occurring in a fruit body of HIMEMATSUTAKE, a mushroom belonging to the genus Agaricus as an active ingredient. The nucleic acid component is obtained by drying a fruit body of HIMEMATSUTAKE, grinding and pretreating the ground material with an alcohol or an alcohol containing ≤20% water as treatment before extraction to remove a low-molecular component. Then the residue is extracted with hot water and the extracted solution is concentrated. An alcohol is added to the concentrated solution, the precipitate is centrifuged, then dissolved in water, the solution is passed through a column having an anion exchange resin as a carrier and the nucleic acid component is adsorbed to give the aimed substance.

62. Document ID: JP 60126079 A
Entry 62 of 73
File: JPAB
Jul 5, 1985

PUB-NO: JP360126079A
DOCUMENT-IDENTIFIER: JP 60126079 A
TITLE: PRODUCTION OF GLUCOKINASE

PUBN-DATE: July 5, 1985

INVENTOR-INFORMATION:
NAME
KAGEYAMA, MASAO
NONAKA, TOUROKU

INT-CL (IPC): C12N 9/12

ABSTRACT:

PURPOSE: To increase the glucokinase content in cultured bacterial cell, and to improve the productivity of flucokinase, by culturing a glucokinase-producing bacterial strain keeping the phosphoric acid concentration in the supernatant liquid of the medium to a specific level.

CONSTITUTION: A bacterial strain is cultured in a medium keeping the concentration of phosphoric acid in the supernatant liquid of the medium (the liquid left after the separation and removal of the bacterial cells from the culture liquid by centrifugal separation e.g. at about 8,000G for about 10min) to ≤100 ppm, (preferably 50∼100ppm) during at least the main cultivation period. Concretely, a glucokinase-producing bacterial strain [e.g. Bacillus stearothermophilus UK-788 strain (FERM-P No.5141)] is cultured aerobically in a nutrient medium having the above phosphoric acid concentration. The obtained bacterial cells are disintegrated and centrifuged to collect the enzyme liquid, which is subjected to the column chromatography after the removal of nucleic acid to obtain the objective glucokinase.

63. Document ID: JP 54073183 A
Entry 63 of 73

File: JPAB

Jun 12, 1979

PUB-NO: JP354073183A
DOCUMENT-IDENTIFIER: JP 54073183 A
TITLE: PREPARATION OF DESOXYRIBONUCLEIC ACID LIGASE

PUBN-DATE: June 12, 1979

INVENTOR-INFORMATION:
NAME
ANDO, TADAHIKO
SHIBATA, TAKEHIKO
HAYASE, EIJI

INT-CL (IPC): C12D 13/10

ABSTRACT:

PURPOSE: To prepare DNA ligase useful for the gene recombination, easily, by culturing DNA ligase-producing bacteria belonging to Bacillus genus, and disintegrating the cultured cells followed by separating and purifying thereof.

CONSTITUTION: DNA ligase-producing bacteria belonging to Bacillus genus, e.g. Bacillus subtilis IAM 1522, are inoculated in a medium containing amino acids, glucose, inorganic salts, etc., and aerobically cultured under agitation at 25∼37°C, and, at the beginning of stationary growth stage, the cells are collected by the cooling and centrifugal separation of the culturing system. The cells are suspended in a buffer solution, treated with lysozyme, disintegrated by ultrasonic treatment, cooled, and separated by centrifugal treatment to obtain extract free from bacterial cell. Streptomycin sulfate is added to the extract, and precipitate is ultracentrifugally removed. The supernatant liquid is subjected to a combination of ammonium sulfate fractionation, gel filtration, DNA-cellulose chromatography, and DEAE-cellulose chromatography by ammonium sulfate concentration gradiation method, and the objective DNA ligase is obtained.

64. Document ID: WO 9521177 A1
Entry 64 of 73

File: EPAB

Aug 10, 1995

PUB-NO: WO009521177A1
DOCUMENT-IDENTIFIER: WO 9521177 A1
TITLE: PROCESS FOR PRODUCING ENDOTOXIN-FREE OR ENDOTOXIN-POOR NUCLEIC ACIDS AND/OR OLIGONUCLEOTIDES FOR GENE THERAPY
PUBN-DATE: August 10, 1995

INVENTOR-INFORMATION:
NAME
COUNTRY
COLPAN, METIN
DE
SCHORR, JOACHIM
DE
MORITZ, PETER
DE

INT-CL (IPC): C07 H 1/08; C12 N 15/10; C12 P 19/34

EUR-CL (EPC): C07H001/08 ; C12N015/10

ABSTRACT:

A process is disclosed for isolating and purifying nucleic acids and/or oligonucleotides for gene therapy. The nucleic acids and/or oligonucleotides are isolated or purified from a substantially biological source. The process is characterised in that the substantially biological sources are disintegrated, if required the residues of biological source are removed or eliminated from the thus obtained fractions by a mechanical process known per se, such as centrifugation or filtering, the thus processed fractions are treated with affinity chromatography material or with inorganic chromatography material for removing endotoxins, the nucleic acids and/or oligonucleotides are isolated on an anion exchanger designed so that DNA starts to be desorbed from the anion exchanger only when the sodium chloride solution ionic strength is at least about 100 mM higher than the ionic strength at which the RNA of the anion exchange material starts to be desorbed from the anion exchanger.

65. Document ID: AU 691574 B, WO 9521177 A1, AU 9516646 A, EP 743949 A1, JP 09508406 W
Entry 65 of 73

File: DWPI

May 21, 1998

DERWENT-ACC-NO: 1995-336694
DERWENT-WEEK: 199832

TITLE: Isolating and purifying nucleic acids for gene therapy - by lysing natural source material and removing endotoxin giving prod. free of endotoxin, RNA and genomic DNA
INVENTOR: COPLAN, M; MORITZ, P ; SCHORR, J ; COLPAN, M

PRIORITY-DATA:
1994DE-4432654 September 14, 1994
1994DE-4403692 February 7, 1994
1994DE-4422291 June 25, 1994
1994DE-4431125 September 1, 1994

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
AU 691574 B	May 21, 1998	N/A	000	C07H001/08
WO 9521177 A1	August 10, 1995	G	031	C07H001/08
AU 9516646 A	August 21, 1995	N/A		

000
C07H001/08
EP 743949 A1
November 27, 1996
G
000
C07H001/08
JP 09508406 W
August 26, 1997
N/A
024
C07H021/00

INT-CL (IPC): A61 K 31/70; A61 K 48/00; B01 J 20/26; C07 H 1/08; C07 H 21/00; C07 H 21/02; C07 H
21/04; C12 N 15/10; C12 P 19/34

ABSTRACTED-PUB-NO: WO 9521177A
BASIC-ABSTRACT:

Isolation and purification., from a biological source, of nucleic acids (I) and/or
oligonucleotides (A) for use in gene therapy comprises:(a) lysing the source material and opt.
removing residual material by standard methods e.g. filtration or centrifuging;(b) removing
endotoxin from the treated lysate by affinity chromatography or an inorganic chromatography
material, and(c) isolating (I) and (A) on an anion exchanger under conditions where DNA starts to
desorb only at an NaCl concn. 0.1M higher than the concn. at which RNA starts to desorb.

Also new is a kit for this process.

USE - The isolated nucleic acid is useful for in vivo or in vitro therapy of genetic diseases
such as cystic fibrosis and muscular dystrophy. The method can also be used to purify
oligonucleotides for antisense or sense treatments, or intact viral particles (for genetic
vaccination) (claimed).

ADVANTAGE - The anion exchange treatment produces (I) and (A) that satisfy all quality control
criteria for use in gene therapy.

66. Document ID: AU 709003 B, WO 9636706 A1, AU 9659219 A, NO 9705280 A, EP 827536 A1, CZ 9703661 A3, SK
9701557 A3, HU 9802557 A2, JP 11505707 W
Entry 66 of 73
File: DWPI
Aug 19, 1999

DERWENT-ACC-NO: 1997-020828
DERWENT-WEEK: 199945

TITLE: Large scale purificn. of plasmid DNA - by treating microbial cell suspensions by heating
and use of an anion exchange matrix and reversed phase HPLC
INVENTOR: LEE, A L; SAGAR, S

PRIORITY-DATA:
1995US-0446118
May 19, 1995

PATENT-FAMILY:
PUB-NO
PUB-DATE
LANGUAGE
PAGES
MAIN-IPC
AU 709003 B
August 19, 1999
N/A
000
C12N015/10
WO 9636706 A1
November 21, 1996
E
033
C12N015/10
AU 9659219 A
November 29, 1996
N/A
000
C12N015/10
NO 9705280 A
January 16, 1998
N/A
000
C12N015/10
EP 827536 A1
March 11, 1998
E
000
C12N015/10
CZ 9703661 A3
April 15, 1998
N/A
000
C12N015/10
SK 9701557 A3
July 8, 1998
N/A
000
C12N015/10
HU 9802557 A2
March 1, 1999
N/A
000
C12N015/10
JP 11505707 W
May 25, 1999
N/A
032
C12N015/09

INT-CL (IPC): A61 K 48/00; C12 N 15/09; C12 N 15/10; C12 P 19/34

ABSTRACTED-PUB-NO: WO 9636706A
BASIC-ABSTRACT:

The following are claimed: (A) a process for large scale isolation and purificn. of plasmid DNA
from large scale microbial cell fermentations comprising: (a) harvesting microbial cells from a
large scale fermentatio n; (b) adding to the harvested microbial cells a lysis soln.; (c) heating
the microbial cells of (b) to a temp. 70-100 deg. C in a flow through heat exchanger to form a
crude lysate; (d) centrifuging the crude lysate; (e) filtering and diafiltering the supernatant
of (d) providing a filtrate; (f) contacting the filtrate of (e) with an anion exchange matrix;
(g) eluting and collecting plasmid DNA from the anion exchange matrix; (h) contacting the plasmid
DNA from (g) with a reversed phase high performance liq. chromatography (RP-HPLC) matrix; (i)
eluting and collecting the plasmid from the RP-HPLC matrix of (h); (j) optionally concentrating
and/or diafiltering the prod. of (i) into a carrier; and (k) optionally sterilising the DNA
prod.; and (B) an isolated and purified plasmid DNA suitable for admin. to humans.

The lysis soln. is a STET buffer (8% sucrose, 2% Triton (RTM), 50 mM Tris buffer, 50 mM EDTA, pH
8.5).

USE - The method provides for the large-scale purificn. of plasmid DNA. The prod. can be used in
polynucleotide-based vaccines for human use or for human gene therapy.

67. Document ID: US 5234829 A
Entry 67 of 73
File: DWPI
Aug 10, 1993

DERWENT-ACC-NO: 1993-264616
DERWENT-WEEK: 199333

TITLE: DNA polymerase having Nick-translation ability from e.g. genetically engineered bacterial
cells - comprises fractionating host cells by sonicating cells, treating with polyethyleneimine,
and dialysing pellets of high polymerase activity etc.
INVENTOR: BROWN, W E

PRIORITY-DATA:
1984US-0638638
August 7, 1984
1987US-0128708
December 4, 1987
1990US-0584437
September 13, 1990

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5234829 A	August 10, 1993	N/A	011	C12N009/12

INT-CL (IPC): C12N 9/12

ABSTRACTED-PUB-NO: US 5234829A
BASIC-ABSTRACT:

Obtaining material having Nick-translation ability from genetically engineered bacterial or yeast
host cells which produce the material in an amt. greater than they would naturally comprises:
placing the genetically engineered host cells which have amts. of material having
Nick-translation activity greater than would have naturally into a container; and fractionating
the cells to isolate the material having Nick-translation activity in less than one week. The
fractionating step includes (a) sonicating the cells; (b) subjecting obtd. crude extract to a
series of treatments with increasing concns. of polyethyeneim ine (PEI) each followed by
centrifuging to ppte. acidic proteins in the crude extract and each step forming PEI pellets of
varying polymerase activity; (c) extracting the pellets of relatively high polymerase activity
with a buffer and contacting with an ion-exchange resin which retains DNA then recovering an
eluate having its DNA removed; (d) treating the eluate with ammonium sulphate at a concn. that
doesn't ppte. a significant amt. of material with Nick-translation activity, centrifuging,
treating obtd. supernatant with ammonium sulphate to ppte. all of material having
Nick-translation activity and centrifuging; (e) suspending the pellet in a buffer followed by
dialysis to remove the ammonium sulphate from protein; and (f) passing suspended pellet over a
2nd ion exchange resin.

USE/ADVANTAGE - In this method, DNA is removed from the system before the polymerase salt pptn.
step, therefore shortening the time period for purifcn. of the DNA polymerase I whether in an
amplified amt. or not, as compared to the time taught in the prior art where amplification of
nucleic acid, and other protein increases time required for purifi

68. Document ID: SU 1311251 A
Entry 68 of 73
File: DWPI
Jan 30, 1988

DERWENT-ACC-NO: 1988-203377
DERWENT-WEEK: 198829

TITLE: Bacillus stearothermophilus strain - is used for prepn. of thermophilic DNA-polymerase by
nucleic acids and proteins removal from cell-free extract
INVENTOR: KABOEV, O K; LOGINOVA, L G ; LUCHKINA, L A

PRIORITY-DATA:
1985SU-3925297
July 4, 1985

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
SU 1311251 A	January 30, 1988	N/A	006	N/A

INT-CL (IPC): C12N 1/20; C12N 9/12; C12R 1/07

ABSTRACTED-PUB-NO: SU 1311251A
BASIC-ABSTRACT:

Bacillus stearothermophilus B-3361 (I) is isolated from Bac. stearothermop hilus VKM-516 by
selection in a liq. nutrient medium. (I) does not form spores when it is cultured in a a
deficient nutreitn medium of up to 1-1.5 units of optical density per ml. at 560nm. (I) grows in
a medium contg. (in wt. %): glucose 0.2; yeast extract 0.1; aminopeptid e 10; MgSO4 0.0025;
KH2PO4 0.7; CaCl2 0.0005; (NH4)2SO4 0.1; and water the remiander. DNA-polymerase is isolated from
an extract of destroyed cells. The activity of the enzyme is 8.0-10 units/mg protein. Typically,
the cells of (I) are destroyed by pressing, and then centrifuged to obtain a cell-free extract.
Nucleic acids are then eliminated by using DEAE-cellulose. Subsequently proteins are sepd. by
chromatography on phospho-cellulose in two stages. The first eluation process is carried out in a
linear gradient of 40-500mM KCl soln., and the second eluation process is carried out in a linear
gradient of 40-300mM KCl soln. Afterwards, the final process for removal of proteins is carried
out by using affinity chromatography on UF(sic)-DNA-cellulose and carrying out eluation with a
linear gradient of 0.25-0.4M KCl soln. USE/ADVATNAGE - In microbiology for prodn. of

DNA-polymerase which is used in biochemical research, e.g. for studying the effects of mesophilic
cells on DNA and for introducing radioactive markers in DNA in vitor. The producer strain
provides a prod. having high activity. Bul.4/30.1.88.

69. Document ID: EP 273811 A, CA 1306689 C, DE 3750330 G, DK 8706456 A, EP 273811 B1, FR 2608052 A, IL 84729 A, JP 63215639 A, NO 8705142 A, PT 86321 A
Entry 69 of 73
File: DWPI
Jul 6, 1988

DERWENT-ACC-NO: 1988-184729
DERWENT-WEEK: 198827

TITLE: Hepatitis B vaccine contg. highly purified surface antigen particles - expressed by
plasmid transformed CHO cells, then purified by fractional pptn. and repeated chromatography
INVENTOR: ADAMOWICZ, P J; GIRARD, M ; MEVELEC, M N

PRIORITY-DATA:
1986FR-0017265
December 10, 1986

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 273811 A	July 6, 1988	F	008	N/A
CA 1306689 C	August 25, 1992	N/A	000	A61K039/29
DE 3750330 G	September 8, 1994	N/A	000	A61K039/29
DK 8706456 A	June 11, 1988	N/A	000	N/A
EP 273811 B1	August 3, 1994	F	010	A61K039/29
FR 2608052 A	June 17, 1988	N/A	000	N/A
IL 84729 A	February 21, 1993	N/A	000	C07K003/28
JP 63215639 A	September 8, 1988	N/A	000	N/A
NO 8705142 A	July 4, 1988	N/A	000	N/A
PT 86321 A	January 17, 1989	N/A	000	N/A

INT-CL (IPC): A61K 39/29; C07K 3/28; C12N 15/00; C12P 21/02

ABSTRACTED-PUB-NO: EP 273811A
BASIC-ABSTRACT:

New recombinant vaccine against hepatitis B is prepd. by expressing hepatitis B surface antigen
(HBSAg) particles from CHO cells transformed with a plasmid contg. the HBsAg gene and able to
release the particles into the culture medium. Supernatant is recovered from the culture medium
(pref. of low serum content), sterile filtered and conc.. The concentrate is treated with a
non-degrading pptg. agent so that heavy DNA, retrovirus particles and proteins are pptd., and
conc. again. The zonal velocity centrifugation (ZVC) is carried out in a gradient which is
non-chaotropic for retroviral particles and able to separate HBsAg according to size and density,
followed by zonal isopycnic flotation centrifugation (ZIFC) to eliminate light and heavy nucleic
acids and proteins. Finally, residual traces of nucleic acids and non-HBsAg proteins are absorbed
in an anion-exchange chromatography (AEC) step.

USE/ADVANTAGE - The final vaccine has exceptionally high purity and immunogenicity, esp. as
regards its ability to induce anti-pre-S2 antibodies.
ABSTRACTED-PUB-NO:

EP 273811B EQUIVALENT-ABSTRACTS:

A method for preparing a recombinant vaccine against hepatitis B comprising both pre-S2 and S
proteins from the surface antigen of the hepatitis B virus, in which surface antigenic particles
of hepatitis B are produced by expression from a culture of CHO cells (Chinese hamster ovary
cells) transfected by a plasmid carrying the HBsAg gene so as to release the antigenic surface
particles in the culture medium, characterised in that the supernatant culture medium is
recovered from at least one culture, particularly in a medium with a low animal serum content,
the supernatant is subjected to sterilising filtration, the supernatant is concentrated, the
concentrate is precipitated by means of a non degrading precipitating agent under conditions
precipitating the heavy DNA classes, the retroviral particles and proteins, a new concentration
is carried out by means of a non degrading precipitating agent under conditions precipitating the
surface antigenic HBsAg particles, then the precipitant is redissolved in a small volume, a zonal
rate centrifugation is carried out in a chaotropic density gradient for the retroviral particles
and chosen so as to allow separation thereof from the HBsAg particles, depending on their size
and density, an isopycnic zonal centrifugation of flotation type is carried out eliminating the
light and heavy nucleic acids and the proteins, and chromatography is effected on an anion
exchange medium so as to adsorb the remaining traces of nucleic acids and remaining non HBsAg
proteins.

70. Document ID: CA 1339772 C, EP 268946 A, DE 3639949 A, JP 63150294 A, US 5057426 A, EP 268946 B1, DE 3787445 G, JP 95013077 B2
Entry 70 of 73
File: DWPI
Mar 24, 1998

DERWENT-ACC-NO: 1988-148786
DERWENT-WEEK: 199820

TITLE: Sepn. of long-chain nucleic acids - using a porous matrix to fix the nucleic acids so that
substances to be sepd. are washed out
INVENTOR: COLPAN, M; HENCO, K ; STICHEL, A

PRIORITY-DATA:
1986DE-3639949
November 22, 1986

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
CA 1339772 C	March 24, 1998	N/A	000	C12N015/10
EP 268946 A	June 1, 1988	E	018	N/A
DE 3639949 A	June 9, 1988	N/A	000	N/A
JP 63150294 A	June 22, 1988	N/A	000	N/A
US 5057426 A	October 15, 1991	N/A	012	N/A
EP 268946 B1	September 15, 1993	E	021	C07H001/08
DE 3787445 G	October 21, 1993	N/A	000	C07H001/08
JP 95013077 B2	February 15, 1995	N/A	012	C07H001/08

INT-CL (IPC): B01 J 41/06; C07 H 1/08; C07 H 15/12; C07 H 21/00; C07 H 21/04; C12 N 1/08; C12 N
15/00; C12 N 15/10; C12 P 19/34; G01 N 30/96; G01 N 33/68

ABSTRACTED-PUB-NO: EP 268946A
BASIC-ABSTRACT:

Method for the sepn. of long-chain nucleic acids (LNAs) from other substances from solns. contg.
nucleic acids (NAs) and other materials and more partic. NA/protein mixts. from biotechnical
prepns. from bacteria, viruses, animal and vegetable tissues and cells as well as body liqs.,
more partic. cell ingredients and/or degradation prods. as well as components of body liqs., is
characterised in that the LNAs in the NA-contg. solns., the tissue cells and/or cells from body
liquids after disintegration under mild conditions are fixed on a porous matrix, whereas the
substances to be sepd. are washed out from the matrix, and the fixed NAs are opt. subsequently
removed from the matrix. More specifically, the porous matrix comprises a material for
chromatography based on silica gel, diatomite, Al2O3, TiO2, hydroxy apatite, dextran, agarose,
acrylamide, polystyrene, PVA or other organic polymers, derivs. or copolymers. The disintegration
under mild conditions may be effected by an enzymatic proteolysis and/or in the presence of
detergents and/or in the presence of denaturing agents or in combination with mechanical
procedures.

ADVANTAGE - The method allows a sepn. to be effected of more than 99%-100% of LNAs from
NA/protein mixts.
ABSTRACTED-PUB-NO:

EP 268946B EQUIVALENT-ABSTRACTS:

A method for the separation of long-chain nucleic acids from other substances from solutions
containing nucleic acids and other materials avoiding the step of a chloroform and/or phenol
extraction and/or density gradient centrifugation wherein the long-chain nucleic acids are fixed
on a porous anion exchanger the anion exchanger having a particle size of from 15 to 250 microns
and a pore diameter of 50 to 2500 nm, whereas the substances to be separated therefrom are washed
out from the anion exchanger using a washing solution having an ionic strength below the elution
point of the long-chain nucleic acid to be separated, and the fixed long-chain nucleic acids are
subsequently removed from the anion exchanger using a washing solution of high ionic strength.

US 5057426A

Long chain nucleic acids are sepd. from other materials in soln. by (a) fixing nucleic acids in
soln. onto a porous anion exchanger matrix of particle size 15-250 microns and pore dia. 100-2500
nms., (b) washing matrix to separate the other substances; and (c) removing fixed long-chain
nucleic acids from the matrix. Matrix comprises silica gel, diatomite, aluminium oxide, titanium
oxide, hydroxylapatite, dextran, agarose, acrylamide, polystyrene, PVA and/or organic polymer
(deriv.). USE - For removing nucleic acid from a protein mixt. or biotechnical prepn. of
bacteria, viruses, animal or vegetable tissue or cells, body liq., or cell ingredients or its
degradation prod..

(12pp)

71. Document ID: EP 77557 A, AU 8289609 A, DE 3141691 A, DK 8204662 A, ES 8403521 A, FI 8203572 A, JP 58079996 A, US 4506014 A, ZA 8207664 A
Entry 71 of 73
File: DWPI
Apr 27, 1983

DERWENT-ACC-NO: 1983-42045K
DERWENT-WEEK: 198318
COPYRIGHT 1999 DERWENT INFORMATION LTD
TITLE: Plasmid pAC1 from acremonium chrysogenum ATCC 14553 - used for prodn. of Acremonium clones
with improved capacity for beta-lactam antibiotic esp. cephalosporin(s) prodn.
INVENTOR: ESSER, K; MINUTH, W

PRIORITY-DATA:
1981DE-3141691
October 21, 1981

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 77557 A	April 27, 1983	G	011	N/A
AU 8289609 A	April 28, 1983	N/A	000	N/A
DE 3141691 A	May 19, 1983	N/A	000	N/A
DK 8204662 A	June 20, 1983	N/A	000	N/A
ES 8403521 A	June 16, 1984	N/A	000	N/A
FI 8203572 A	June 30, 1983	N/A	000	N/A
JP 58079996 A	May 13, 1983	N/A	000	N/A
US 4506014 A	March 19, 1985	N/A	000	N/A
ZA 8207664 A	June 30, 1983	N/A	000	N/A

INT-CL (IPC): C07G 3/00; C07H 21/04; C12N 1/14; C12N 15/00; C12P 17/14; C12P 19/34; C12P 35/00;
C12R 1/64

ABSTRACTED-PUB-NO: EP 77557A
BASIC-ABSTRACT:

New plasmid pAC1 is obtainable from Acemonium chrysogenum ATCC 14553, and has a contour length of
ca. 6.7 micron and a molecular size of ca. 20.9 kilobases (kb).

A preferred plasmid is one which restriction endonuclease Bgl II splits into 6 fragments 5.10,
4.75, 4.30, 3.50, 2.15 and 1.05 kb in size, restriction endonuclease EcoR I splits into 5
fragments 8.1, 4.7, 4.4, 2-band 1.3 kb in size and restriction endonuclease Hpa I splits into 9
fragments 5.61, 4.30, 3.50, 2.72, 1.35, 1.25, 0.82, 0.74 and 0.61 kb in size.

Prodn. of a hybrid vector which can be introduced into Acremonium species to give clones ith
ehanced capacity for the prodn. of beta-lactam antibiotics, esp. cephalosporins.
ABSTRACTED-PUB-NO:

US 4506014A EQUIVALENT-ABSTRACTS:

Plasmid pAC1 is isolated from Acremonium chrysogenum ATCC 14553 and has contour length 6.7
microns and mol. size 20.9 kilobases. Plasmic is divided into 6 fragments of sizes 5.10, 4.75,
4.30, 3.50, 2.15 and 10.05 kilobases by restriction endonuclease Bgl II, into 5 fragments of
sizes 8.1, 4.7, 4.4, 2.6 and 1.3 kilobases by restriction endonuclease ECO R I, and into 9
fragments of sizes 5.61, 4.30, 3.50, 2.72, 1.35, 1.25, 0.82, 0.74 and 0.61 kilobases by
restrictions endonuclease Hpa I.

Plasmid is obtd. by (i) prepurifying total DNA from protoplast lysates or mechanically-ruptured
mycelia by caesium chloride centrifugation; (ii) sepg. out plasmid DNA and mitochondrial DNA from
circular DNA by chromatography; and (iii) isolating and purifying prod. by several consecutive
caesium chloride centrifugations.

USE - As hybrid vector to promote biosynthesis of beta-lactam antibiotics. (3pp)

72. Document ID: JP 58152478 A
Entry 72 of 73
File: DWPI
Sep 10, 1983

DERWENT-ACC-NO: 1983-791913
DERWENT-WEEK: 198342
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TITLE: Purificn. of DNA polymerase III - obtd. by adding polyethyleneimine to cell-free extract
of Bacillus coli Mig., by column chromatography process

PRIORITY-DATA:
1982JP-0033969
March 5, 1982

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 58152478 A	September 10, 1983	N/A	008	N/A

INT-CL (IPC): C12N 9/00

ABSTRACTED-PUB-NO: JP58152478A
BASIC-ABSTRACT:

DNA polymerase (III) is purification process in which polyethylene imine is added to the
cell-free extract of Bacillus coli Mig, the precipitate formed is suspended in buffer liq. contg.
sodium chloride, the suspension is subjected to centrifugal sepn. the supernatant liquid obtd. is
mixed with ammonium sulphate, and then the precipitate formed is subjected to column
chromatography in such a way as to separate DNA polymerase (III) as well as DNA polyermase (I) at
the same time, using a phospho-cellulose column pref. by two-stage treatment.

This method can simply purify DNA polymerase (III) to a higher degree in a high yield and with
high reproductivity without the need for large-capacity centrifugal separators. The purificn. of
DNA polymerase can also be attained with lesser losses from wild type strain.

73. Document ID: DD 137234 A
Entry 73 of 73
File: DWPI
Aug 22, 1979

DERWENT-ACC-NO: 1979-77415B
DERWENT-WEEK: 197943

TITLE: DNA synthesis stimulating protein - obtd. from spleen of mice infected with Rauscher
leukaemia virus
INVENTOR: DRESCHER, B; HUNGER, H D

PRIORITY-DATA:
1978DD-0206416
June 30, 1978

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DD 137234 A	August 22, 1979	N/A	000	N/A

INT-CL (IPC): A61K 35/28; C07G 7/02

ABSTRACTED-PUB-NO: DD 137234A
BASIC-ABSTRACT:

New DNA synthesis-stimulating protin is obtd. by homogenising and repeatedly centrifuging spleen
tissue from mice infected with Rauscher leukaemia virus; treating the virus-contg. sediment with
0.25-0.5M salt soln. (opt. contg. detergent); sepg. the dissolved protein mixt. by gel filtration
with molecular sieves of the 'Sphadex' (RTM) G100-G200 type; and purifying the fraction of
molecular wt. 20,000-60,000 by affinity chromatography on immobilised DNA.

The protein can be used in conjunction with RNA-regulated DNA-polymerase (nevertase) for the in
vitro synthesis of complementary DNA (gene synthesis). The DNA is useful in the analysis of
oncovirus infections and in genetic manipulations.

Term
Documents
7 SAME 8
73
including document number
Display Format:

Search Results - Record(s) 1 through 9 of 9 returned.

1. Document ID: US 5837529 A
Entry 1 of 9
File: USPT
Nov 17, 1998

US-PAT-NO: 5837529
DOCUMENT-IDENTIFIER: US 5837529 A

TITLE: Method for lysing cells

DATE-ISSUED: November 17, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wan; Nick C.	Newton	MA	N/A	N/A
McNeilly; David S.	Saugus	MA	N/A	N/A
Christopher; Charles William	Rockport	MA	N/A	N/A

US-CL-CURRENT: 435/259; 435/306.1

ABSTRACT:

This invention relates to a method for lysing cells. The method comprises simultaneously flowing a cell suspension and a lysis solution through a static mixer, wherein the cells exit the static mixer lysed. In another aspect of the present invention, the invention relates to a method for precipitating cell components, protein, and nucleic acids from a cell lysate or other solution containing precipitable material. The method comprises simultaneously flowing a cell lysate or other protein containing solution and a precipitating solution through a static mixer, wherein the lysate or protein solution exits the static mixer with its precipitable components precipitated. In another aspect of the present invention, the invention relates to a method where the two above-mentioned methods above are combined by using static mixers in series.
16 Claims, 3 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 3

2. Document ID: US 5563051 A
Entry 2 of 9
File: USPT
Oct 8, 1996

US-PAT-NO: 5563051
DOCUMENT-IDENTIFIER: US 5563051 A

TITLE: Production of hyaluronic acid

DATE-ISSUED: October 8, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ellwood; Derek C.	Cumbria	N/A	N/A	GBX
Evans; Charles Gervase T.	Salisbury	N/A	N/A	GBX
Dunn; Geoffrey M.	Livingston	N/A	N/A	GBX
McInnes; Neil	Peebles	N/A	N/A	GBX
Yeo; Richard G.	Edinburgh	N/A	N/A	GBX
Smith; Keith J.	Edinburgh	N/A	N/A	GBX

US-CL-CURRENT: 435/101; 435/252.1, 435/84, 435/885, 536/55.1

ABSTRACT:

A process for the production of hyaluronic acid by continuous fermentation of Streptococcus in a chemostat culture gives high yields of high molecular weight hyaluronic acid uncontaminated by toxic impurities. The process is advantageous in that it solves the problem of traditional batch cultures in which degradation enzymes can begin to break down the cell walls of Streptococcus releasing cells contents into the fermenter broth complicating the purification of high molecular hyaluronic acid.
27 Claims, 0 Drawing figures
Exemplary Claim Number: 1

3. Document ID: US 5411874 A
Entry 3 of 9
File: USPT
May 2, 1995

US-PAT-NO: 5411874
DOCUMENT-IDENTIFIER: US 5411874 A

TITLE: Production of hyaluronic acid

DATE-ISSUED: May 2, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ellwood; Derek C.				

Cumbria
N/A
N/A
GBX

Evans; Charles G. T.
Salisbury
N/A
N/A
GBX

Dunn; Geoffrey M.
Livingston
N/A
N/A
GBX

McInnes; Neil
Peebles
N/A
N/A
GBX

Yeo; Richard G.
Edinburgh
N/A
N/A
GBX

Smith; Keith J.
Edinburgh
N/A
N/A
GBX

US-CL-CURRENT: 435/84; 435/101, 435/252.1, 435/885, 536/55.1

ABSTRACT:

A process for the production of hyaluronic acid by continuous fermentation of Streptococcus equi in a chemostat culture gives high yields of high molecular weight hyaluronic acid uncontaminated by toxic impurities. The process is advantageous in that it solves the problem of traditional batch culture in which degradation enzymes can begin to break down the cell walls of Streptococcus releasing cell contents into the fermenter broth, leading to purification difficulties.
14 Claims, 0 Drawing figures
Exemplary Claim Number: 1

4. Document ID: US 4966792 A
Entry 4 of 9
File: USPT
Oct 30, 1990

US-PAT-NO: 4966792
DOCUMENT-IDENTIFIER: US 4966792 A

TITLE: Method of producing gradient gel medium membrane for electrophoresis

DATE-ISSUED: October 30, 1990

INVENTOR-INFORMATION:
NAME
CITY
STATE
ZIP CODE
COUNTRY

Terai; Fumitaka
Kanagawa
N/A
N/A
JPX

Yukawa; Kimio
Kanagawa
N/A
N/A
JPX

Suefuji; Mineo
Kanagawa
N/A
N/A
JPX

US-CL-CURRENT: 427/358; 204/456, 204/470, 427/420

ABSTRACT:

A method for producing gradient gel medium membrane for electrophoresis for determining the base sequence of DNA or DNA partially decomposed material providing an improved productivity. High and low concentration monomer solutions are mixed with a predetermined quantity of polymerizing reaction initiator solution by a static mixer to prepare a gel forming solution for coating on a continuously moving web. The flow-rate ratio of the high and low concentration monomer solutions is gradually changed so as to vary the concentration of the monomer in the gel forming solution alternatively from low to high and from high to low along the web.
9 Claims, 7 Drawing figures
Exemplary Claim Number: 1,5
Number of Drawing Sheets: 3

5. Document ID: WO 9723601 A1
Entry 5 of 9
File: EPAB
Jul 3, 1997

PUB-NO: WO009723601A1
DOCUMENT-IDENTIFIER: WO 9723601 A1
TITLE: METHOD FOR LYSING CELLS
PUBN-DATE: July 3, 1997

INVENTOR-INFORMATION:
NAME
COUNTRY
WAN, NICK C
N/A
MCNEILLY, DAVID S
N/A
CHRISTOPHER, CHARLES W
N/A

INT-CL (IPC): C12 N 1/06

EUR-CL (EPC): C12N001/06

ABSTRACT:

This invention relates to a method for lysing cells. The method comprises simultaneously flowing a cell suspension and a lysis solution through a static mixer, wherein the cells exit the static mixer lysed. In another aspect of the present invention, the invention relates to a method for precipitating cell components, protein, and nucleic acids from a cell lysate or other solution containing precipitable material. The method comprises simultaneously flowing a cell lysate or other protein containing solution and precipitating solution through a static mixer, wherein the lysate or protein solution exits the static mixer with its precipitable components precipitated.
In another aspect of the present invention, the invention relates to a method where the two

above-mentioned methods are combined by using static mixers in series.

6. Document ID: WO 9808095 A1
Entry 6 of 9
File: EPAB
Feb 26, 1998

PUB-NO: WO009808095A1
DOCUMENT-IDENTIFIER: WO 9808095 A1
TITLE: PROCEDURE FOR ATTACHING SUBSTANCES TO PARTICLES
PUBN-DATE: February 26, 1998

INVENTOR-INFORMATION:
NAME
COUNTRY
OSTROW, DAVID H
N/A
COHEN, LARRY M
N/A
EBLE, KIM S
N/A
MANEY, PETER J
N/A
STECKEL, ERIC W
N/A
RUBIN, BRIAN L
N/A
WITTMAN, CRAIG A
N/A
JOHNSON, PAUL A
N/A

INT-CL (IPC): G01 N 33/543; B01 J 19/24

EUR-CL (EPC): B01J019/24 ; G01N033/543

ABSTRACT:

A process for attaching a substance, especially an organic substance, onto one or more microparticles is provided. The process involves providing a quantity of a substance to be attached onto the microparticles, as well as a quantity of microparticles. The organic substance is then directed through a first conduit (12, 206) and the microparticles are sent through a second conduit (16, 212). The first (12, 206) and second (16, 212) conduits meet at a confluence point (26, 214, 305), and it is there that the substance and the microparticles mix such that the substance attaches to, and coats the microparticles. In a preferred embodiment, there is further provided mixing means such as an in-line static mixer (22, 216, 238, 307, 317, 323, 329) for mixing together the substance and the microparticles. The coated microparticles can be utilized in all manners of immunoassay, nucleic acid assay, cell assay and therapeutic injectable applications. The microparticles herein may also be replaced with another organic substance for conjugation or attachment to the first organic substance.

7. Document ID: EP 293010 A2
Entry 7 of 9
File: EPAB
Nov 30, 1988

PUB-NO: EP000293010A2
DOCUMENT-IDENTIFIER: EP 293010 A2
TITLE: Method of producing gradient gel medium membrane for electrophoresis.
PUBN-DATE: November 30, 1988

INVENTOR-INFORMATION:
NAME
COUNTRY
TERAI, FUMITAKA
N/A
YUKAWA, KIMIO
N/A
SUEFUJI, MINEO
N/A

INT-CL (IPC): G01N 27/26

EUR-CL (EPC): B01D057/02 ; G01N027/447

ABSTRACT:

A method for producing gradient gel medium membrane for electrophoresis for determining the base sequence of DNA or DNA partially decomposed material providing an improved productivity. High and low concentration monomer solutions are mixed with a predetermined quantity of polymerizing reaction initiator solution by a static mixer to prepare a gel forming solution for coating on a continously moving web. The flow-rate ratio of the high and low concentration monomer solutions is gradually changed so as to vary the concentration of the monomer in the gel forming solution alternatively from low to high and from high to low along the web.

8. Document ID: US 5837529 A
Entry 8 of 9
File: DWPI
Nov 17, 1998

DERWENT-ACC-NO: 1999-023457
DERWENT-WEEK: 199902

TITLE: Method for lysing cells while avoiding the shearing of genomic DNA - comprises providing static mixer, and simultaneously flowing cell suspension fluid and lysis solution through mixer
INVENTOR: CHRISTOPHER, C W; MCNEILLY, D S ; WAN, N C

PRIORITY-DATA:
1994US-0324455
October 17, 1994
1996US-0632203
April 15, 1996

PATENT-FAMILY:
PUB-NO
PUB-DATE
LANGUAGE
PAGES
MAIN-IPC
US 5837529 A
November 17, 1998
N/A
008
C12N001/06

INT-CL (IPC): C12 N 1/06

ABSTRACTED-PUB-NO: US 5837529A
BASIC-ABSTRACT:

Method for lysing cells while avoiding shearing genomic DNA, comprises providing a mixer and
flowing a cell suspension fluid and a cell lysing solution through the mixer. the contact of the
two liquids lyses the cells.

Also claimed is separating plasmids from plasmid containing cells using the method described
above.

ADVANTAGE - The method is effective, economical and automatable.

9. Document ID: AU 706857 B, WO 9723601 A1, AU 9646077 A, EP 811055 A1, JP 11500927 W
Entry 9 of 9
File: DWPI
Jun 24, 1999

DERWENT-ACC-NO: 1997-351044
DERWENT-WEEK: 199936
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TITLE: Lysing cells using static mixers - for preparation of DNAs as therapeutic agents for e.g.
gene therapy
INVENTOR: CHRISTOPHER, C W; MCNEILLY, D S ; WAN, N C

PRIORITY-DATA:
1995WO-US16843
December 21, 1995

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
AU 706857 B	June 24, 1999	N/A	000	C12N001/06
WO 9723601 A1	July 3, 1997	E	017	C12N001/06
AU 9646077 A	July 17, 1997	N/A	000	C12N001/06
EP 811055 A1	December 10, 1997	E	000	C12N001/06
JP 11500927 W	January 26, 1999	N/A	016	C12N001/06

INT-CL (IPC): C12 N 1/06

ABSTRACTED-PUB-NO: WO 9723601A
BASIC-ABSTRACT:

Lysing cells comprises simultaneously flowing a cell suspension and a lysis solution through a
static mixer, where the cells exit the static mixer lysed. Also claimed are: (a) a method of
precipitating cellular components from a solution, which comprises simultaneously flowing a cell
lysate and a precipitating solution through a static mixer, where the cellular components exit
the mixer precipitated, and (b) a method of releasing plasmids from cells, which comprises
simultaneously flowing a suspension containing the cells and a lysis solution through a static
mixer, where the cells exit the mixer lysed and plasmids released from the cells.

USE - The method can be used in the preparation of DNAs as therapeutic agents, i.e. in gene
therapy, for the treatment of genetic diseases and for genetic immunisation.

ADVANTAGE - The method can be used for the treatment of multi-litre amounts of solution
containing multi-gram amounts of cells. These can be lysed rapidly, making large scale biological
procedures involving cell lysis feasible.

Term	Documents
1 SAME 2	9

including document number

Display Format: